

EP 0 786 519 A2

	TTACTGACCA AAATTTAAAC CAAAACGTAT GTTGATCTGC TAAACTCCCC ATGATTGTAG	480
	GATTTTTTAAA TAATGTCGCA AAGCCAAGCA CTATCCCCAA GAAAGCGAAC ATTAATACCG	540
5	GTACAATCAT TGCACTACCG AAACGCTTTA TCGCATTTCAT CTTCTATTCC CTCCATATCA	600
	TCTTTCCTAA CAATACATCT AATTAGATTG ATTTATAAAT AGATGTCTTA CTATTTAAAT	660
	ATAATATATA GTAAACGCTT ACACACCTAC AACGACATTG ACGTATTTTG AAAGTATTTT	720
10	GTATAATCAG ATTATCTTTT CATATAGTGA AAATTTTTTC ACGACCTTAT ATATGACATC	780
	GTTGTATTTG TAATACATTC GTTTTAAACG CATAATCAAA CCTATATCAA TACACAAATA	840
15	TATATAATGA CATAAAGAT TTTAATGTAA TAACGATCTA TTACACATTT ATTTTCAAGG	900
	AGGTTGAATA TGTTTTTAGA TGAACACATT AATCGAAACT TTGATAAACT TAATGATAAT	960
	GATTTACATA TCGCTCACTT TATCAATACA CATATAGATG AATGTAAAAA TATGAAAATA	1020
20	CAAGATTTAG CGCAATTCAC ACATGCCTCG AATGCAACCA TTCACAGATT TACACGCAAA	1080
	TnAGGTTTTG ACGGTnATAG TGGATTTAAA TCGTACCTTA A	1121

(2) INFORMATION FOR SEQ ID NO: 631:

25	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 4005 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
30	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 631:

35	AACCTTCCAT TTTACTTGAT CGATAACATC AGTTCGTCTT TACAAATCTC TTCATTAATA	60
	TGCGTCTTAA AACCATGAAA TTTAATCATGT TCCGATAAAT GATAATCTTC TACAAGTTGT	120
	CGATATTCTG ACAAACCATT TCCATGTCCA TAAATATTCA ATTGAATATT GGGATGTTTT	180
40	GTTACTAATT GCTTGATTAC TTCAATTTGA TGTTTAATTT GTTTATTTTC AACGAGGCGA	240
	GCAATTGATA TGATATGATT TTTCTCCTTT TGATTGATGT CAAATTGATA CTTTAAATTT	300
	GCCACGTAGC CAACCGGAAT ATTGATAACT GGTATTTTAT TTTCAATATA TTGTGAAATA	360
45	TCTTGGCATT GCTTTTCTGT TGATACAACA ATCGCTTTAT AACGTGTTAA ATTATTAAAC	420
	ACTGTTTTAT AAAAATTTTT TATACCATTA CCGGCACCGG ATAAATGTGT ACTATGGAGC	480
	ACAACAATAA CTGGAATACT TTGATTTAAT CCCGCTATAA CATTTCTTAA TTCATGAGGA	540
50	CGATCTAATA TGATTTGATC ATTATTTTTA CATAATGAT GGAGAAAATA TTGAACTAAT	600
	TCATCTTCTG TATCAAAAAA TTGTTGATGC TGGTCTTCAT TTAAGATAAC CTTTGTGAGC	660

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	TAGTAATTTT	CGAGTACAAT	CCGTTGTCCT	TCACCTAAAA	TTCGAGAACA	ACTTAAAAAG	780
	CCTCTTCCAT	CATACAATTC	GCGTTTTACT	TTTCTTCTTT	TATGATCAAA	ATAATTCACA	840
5	TAATTTAATT	GATGATACTG	TTTATCTAAA	AAATGAGCAT	ACATTACAAA	TTGCTCTTCA	900
	TCATATATTC	TGACATCATT	TGAATTTTCC	ACAAATTTCA	ATGTGTACCT	ACATGACTTT	960
10	TCCCAATACT	GTATCCAGTT	AACCTGCTTT	GTCTTTTTAT	AATTGATTGC	TTTTTGAAAA	1020
	TAGTCATACA	TTGTAAATAC	ATCATTTTCA	ATCTGATGTT	GCTTCGCATA	TGTGTATGAA	1080
	TAAGGATTCC	ATTTAACATA	TACACATTTT	GAAGATATGC	CGTGTGTTT	GAACAACTTC	1140
15	AATCTATTTA	TTTGCGCTTT	TTCTACACCT	GTAATTTTAC	TTTCTAAAAT	TGTTCCCTAA	1200
	ATGTAATTCA	TATTATCGCC	TCATATAAGT	TTTATTCOGT	ATCTTTATTG	TTTATTTTAT	1260
	ATGAAAAATA	CATCTATTGC	ATGTGTAATT	ATAAAAAAAC	CAGGCCACAA	GGACCTGGGT	1320
20	CATATTGTAT	TATTTGTTTT	GTTTTTTGCG	ACGACCGAAT	AACAATAATG	AACCTAATGC	1380
	TGCAAATAAT	CCACCAAATA	ACGTTGCGTT	ATTTGAGCCG	TTATTTTCAC	TACCTGTTTC	1440
	TGGTAATGCT	TTTGCTTTAT	TGTGATGGTC	TTTAGTAGTA	CTCATTGGTT	TAACAGGTGT	1500
25	ATGTTTTCT	GCATCCGAGT	CTGAATCGCT	GTCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	1560
	ATCAGAGTCT	GAGTCGCTGT	CCGAATCTGA	GTCGCTATCT	GAGTCTGAGT	CGCTGTCTGA	1620
	ATCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	ATCTGAGTCT	GAATCGCTGT	CTGAATCTGA	1680
30	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	ATCTGAGTCG	CTATCTGAGT	CCGAATCGCT	1740
	ATCTGAATCT	GAGTCGCTGT	CTGAGTCTGA	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	1800
35	GTCCGAATCG	CTATCTGAAT	CTGAGTCGCT	GTCTGAGTCT	GAATCGCTAT	CTGAATCTGA	1860
	GTCGCTATCT	GAGTCTGAAT	CGCTGTCCGA	ATCTGAGTCG	CTATCTGAAT	CTGAGTCGCT	1920
	GTCTGAATCT	GAATCACTGT	CTGAGTCTGA	GTCGCTGTCT	GAGTCTGAGT	CGCTGTCTGA	1980
40	GTCACATATCT	GAGTCTGAAT	CGCTGTCTGA	TGTATCTTCT	TCGAAGTATC	CGTTATCAAG	2040
	TGTGAAATCA	TCATGATCCG	TAATTGTTAC	GTCAACTTCG	CCACCATCTG	CATCTTTATC	2100
	ATCTTCAGTT	GTATTTGTAA	CTGTTTGTGT	TAAGCCAGCA	GGCTTTTCAA	AAATAACTTT	2160
45	GTATTTACCG	CTATCTAAAT	TATCAAAGCA	GTATTTACCA	TTTTCATCTG	TTTAGTTGT	2220
	TCCAATTACT	TCGCCTTTTT	CATTTAATAA	AGTAACTTTA	ACATCTTTGA	TACCTTTTTTC	2280
50	AGTTGAATCT	TGTTTGCCGT	CTTTATTACT	GTCGTACCAA	ACATAATCAC	CTAAACTATA	2340
	TTTTGGTGTT	TTATAGAAAC	CACTGTCTAA	TGTCATGTTA	TCTGCATCTT	TAATGACACC	2400
	TGTTGTTGTT	AAACCAITAG	AATCTTTTTTC	AGTATCATTT	CCAGAAGTTA	CTGAAGTTGG	2460

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	TTGATATTTA CCATTTTCAT CTGTTGTAAC TGTTTTAA AACTTGTGCGT TTTCATCTTT	2580
	TAACGTAAGT GTTACACCTG AAATGCCCTT TTCATCTTTA TCTTGAACAC CGTTTTTATT	2640
5	TGTATCTTCC CATACATAGT CACCTAAGTT GTAAGTCGGT TTGTAGAAAC CAGAGTCAAT	2700
	AGTATCGTTA TCTTTATCTT TAATGACACC TGTGTGTGAT GTACCATTGT AATCTATAACC	2760
10	TTCATCAGTT CCTGAACCTA CTTGTGTGTTG TGTGTAACCT GATGGTGT TTGCGAATTCAAC	2820
	TTTATAAGTT CCATTTTCTA ATCCAGTAAA TTGATATTTA CCATCTTTAT CTGTTTTAGT	2880
	TGTTTGTA AACTCACCCT TTTCAATTTT CAATGTAAGT GTTACGCCCTG AAATACCTTT	2940
15	TTCAGTTGAA TCCTGCTTAC CATCTTTATT TGTATCTTCC CATAcataat TACCTAAATT	3000
	ATATTTTGGT GTTTTGTAGA ATCCACTATC TAATGTCATG TTATCAGCAC CATTAATAAC	3060
	ACCTGTTGTT GTTAAACCAT TAGAGTCTTT TTCAATGTCG CTACCAGATG TTACTGTAGT	3120
20	CGGTGTATAG CCTTCTGGTG TAGTAAATTC AACTTTATAA TTACCATTAT CTAAATCAGT	3180
	AAATTTATAT TTGCCATCAG CGTCTGTTGT AACTGTTTTT AaCagTTACC GTTTTCATCT	3240
	TTTAATGTTA CCGTTACGCC AGATATACCT TTTTCATCTT GGTCTTGGAT ACCATTTTTA	3300
25	TTTGTATCTT CCCAGACATA GTCACCTAAG TTGTATTTAG GTTTGTAAAT ACCTAAGTCT	3360
	GCAGATAAGT TATCTTTGCC ATTAAGTGTATA ATAAGTGAAG ATAAGCCGTT TGAATCTAAT	3420
30	TCTTCGTTAT TACCTTGTTT TGAAGGGGTT ACTTCATAAC CTTTGGGTAA GTTTGAAAAT	3480
	TCTACACGGT AATCTCCATT AGGTAAGTTT GGAATCAAGT ATGACCCATC TTCTTTAGTA	3540
	ACTGCTTCTC CTACTTTTGT ATTTGTATTA TTATCAAATA CAGTTACAGT TACATTGCCA	3600
35	ACGCCTTTTT CTCCTAATTC TTGAACACCG TTTTATTAG TATCTTCCCA TACGTAGTTA	3660
	CCAATTTTAT ATACTTCTTG ACCAGctCCG CCACTTTGGT TATTAGTAAA TCCTAAAGCA	3720
	TTGCCAGTAG AAACGGATTT ATTACCTGTT GAAGATAAAG TAGCCATTGT AACAAAGTGT	3780
40	GGGCTTTCGC TATTTGTATA TTGGAATTTT GTATTAAACCA TTACAACATA AGCAGAATCT	3840
	GCATTTCCAA AATCAATAAC AGCGCTATTG TtGTCGCCAT ATGTAATTTT CTGCAAGTAT	3900
	TGATTTGTTA CATCTGTAAG CTCTTTAGTA TTCACATCGT ATCCTTTATT TAATGTATAA	3960
45	CCTTTAGGAA CTGATATAT TTTTATATCT GTTACATCTT TATTT	4005

(2) INFORMATION FOR SEQ ID NO: 632:

(1) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 1440 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 632:

5 TATTAGGTTA CTCTAGTTTC CAAAGCGGGA ATTTTAATGT TATTAACAGC AAGGACAGCA 60  
 AAAGCAATAT CGGCGCATTG ATTGAAAATC CAGGAATATA TCCTTTTATG TCTGGATATG 120  
 AAAACTTGAA GTTATTGAAT GAATCAAAAA ACACTCAAGA TATCGATAAA ATTGTCTCAC 180  
 10 AACTTCATAT GGATGAATAC ATTCATAAAA AAGCTAAAAC GTATTCTCTT GGTATGAAAC 240  
 AAAAATTAGG AATTGCTATA GCATTTTAA ATAAACCTCA ATTCATTATC TTAGATGAAC 300  
 CAATGAATGG CTTAGATCCA AAAGCTGTGC GAGATGTACG TGAATTGATT GTCCAAAAAG 360  
 15 CGCAAGAAGG TGTTACTTTC TTAATTTTGA GTCATATTTT AAGTGAATTG GTTAAAATCA 420  
 CAACTCTAT CCTTATTATT AACAAAGGTA AAATTGTTAC AGAAACATCG GAAGAAGAAC 480  
 TTAAACAATT TAAAGATAAT GATTTAGAAA ATGTATTACT AGAAATCATA GAAAGGGAGG 540  
 20 ACCAAGCATA AAATGGGAAC TTAAATTTAA CAAGAATGTT TCAAATTATT TAAAAAGAAA 600  
 TCAACTTTTA TCGCACCTAT TGTCTTTATT CTAATAATGG TTGCTCAAGG TTATATTGCT 660  
 ACAAATACA ATGAAATTTT TACGCCACAG GAATCTTTCA CATCTGCTTA TAATGGTTTT 720  
 25 TCATGGTTTG CATTTTTATT AATTATTCAA GCAAGTACAA TCATTTCAT GGAATTTTAT 780  
 TACGGTACGA TTAAAAATTT ACTCTATCGT GAATATTCAA GAACAACTAT GATTGTTAGC 840  
 AAAATCATCA CATTATTTAT TATTTCTTTA ATTTATTTTG TTATTACAAT TATTGCTTCA 900  
 30 ATTGTTATTG GGTCTTTATT CTTAATGAT TTAAATATAT TTGAAAGTAG CGGTAATCAA 960  
 TTATCTTTAT TGAATCAATT ATTATTAGTT AGTTTAGGCA CATTTGTTGG CGTTTGGTTA 1020  
 35 GTTTTAAGCT TAACGTTGCT ATTATCATCT GCAACAAATT CAACGGGAGT AGCCATTGCT 1080  
 GTAGGTATTG TTTTATTATT TGCAAGTTCT ATTTTAGCAG TTATTCAAAC GGCACTTTTA 1140  
 GAAAAAATAG ACTGGCTAAA GTGGAATCCT ATTAATATGA TGAATATTAT GCTTCAAACA 1200  
 40 GTTGAAAAAG GCTTTAGTAA GTCGACAAAA TTAGAACTTC ATGAATTGTT TATTGGTAAT 1260  
 ATTGCTTATA TTTCTATTTT CTTAATACTT GTAGTATTTA TTTTCAAGAA GAAAAATATT 1320  
 TAGTAACTTA AAGTATTTAA TGTCTAAATA CACACATATT CCATCGTAAT TCAAAATCAT 1380  
 45 TTTCAAATCC CTTACCCCAA ATAATGGTGC GGGGATTTTT TCATCCAAAT TTTGGAAATT 1440

## (2) INFORMATION FOR SEQ ID NO: 633:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 633:

	GCTGACATAA TTGCATCAAA TTTCACATCC CCATAAAAAT CGCTACCACA TAACCTACGA	60
5	TAATACCTAC AAGAACTGGA ATTAAAGATA GGAATCCTTT AAAAAATCCT TGAACGACTA	120
	TTGTTACAAG CAAGGTTATC ATTGCAACAA TTAAGAACT GATATTGTAA CCTTTTCATAT	180
	CTCCAGGATT TTCATACATT GCCATATTGA CTGCAGTAGG CGCTAAGCTT AAACCAATTA	240
10	CCATGATGAC TGGTCCAACA ACAACTGGTG GTAATAATTT CATTAACCAT GCTGTCCCAC	300
	TTAATTTGAT TAGAATCCCG ATGATGACGT ACATAACACC ACTCATGgAT AATGCTACAA	360
	GCATGTCTCC TAAGCTATGC GTACTTAATC CCGTGATAAT TGGCGTGATA AATGCAAAGC	420
15	TAGATCCCAA GTATGCTGGT ATTTGCGCCT TCGTTATTAA GATATAAAGT AATGTACCGA	480
	TTCCCGAAGC TAGTAACGCT GCTGATATTG GTAGTCCTGT TAAGAAATGGT ACTAGTACTG	540
20	TTGCGCCAAA CATCGCAAAT AAATGTTGTA AGCTTAAAAA TGCCCATTGC GCTGGTTGTG	600
	GTTTTTCATT TACATCTAGT ACGGGTTTTA CTGTTCTGTC AAACATTTCA TCATTTTGCA	660
	TAATATTCAT TTCCTCCGAT AATAAAAAAA TCTCTTTACA TCAGTATATG TAAAGAGACA	720
25	AAAAGTGTGA CAAGTTGCTA CAAGTCATTT TCGTCCATAG AAATTGACTT ATAGTTGTGCG	780
	AACATGAGGG TATTATTAGA TAAACAAGCA TATGAAAAC TATTTATCAT TCAACTCCCC	840
	CACCTTTTTT AGTCTCTCGT ACTGAATTAA AAGGGGtATT ATTTAATTAT AACTGCATTT	900
30	CTTTGATCca TTtCTTCyAA ATAGACACTT ACCGTTTCCT CTTTAGAAGT AGGTAWATTT	960
	TTACCAACAA AATCTGCTCG AATTGGTAAC TCACGATGTC CTCGATCAAC CAAAGCAGCT	1020
35	AAACCAATTT TAATAGGTCT AGCATTTAGC AAAATAGCAT CAAGTGAAGC ACGAACCGTT	1080
	CGACCAGTAT ACAGCACATC GTCAATAATG ATGACTACTT TATCTGTAAT ATCTGTGTCG	1140
	ATGTCTATTG CGTCTTTTGT CGTAAAGTAT GACATGTGcT CTATATCATC TCTAAAGTAT	1200
40	GTAATATCAA TTGTTCCAGT AGGTATACGT TGTGTCTCAA TTTGATGAAT TTtATCTTGT	1260
	ATACGATTCG CTAAATATTC ACCTCTTGTh TTGATACCTA AAAGATTAAA TTATCAGTAC	1320
	CTT	1323

## (2) INFORMATION FOR SEQ ID NO: 634:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 761 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ACCCATCTCA TCGTATTTTG AATTTAATAG ACGAGATCGA TGTATATCTG AATTCATCCC 60  
 AACTATGGAT TAATGTTGGT ACATCATCAA CGCATAACCA ACATTTTGAG CAGTTGTTTT 120  
 5 ATAAGTAACG TGATTTTAT CTAATTGCCC TCTTAATGCG TCCTCTGTAA ATTCAACACT 180  
 ATCAGAACCA TTAGAGGTCG CTTCATATAA GTTATTAGAT GCAATATGTG CTAAATCGCT 240  
 ATTGATTTTC AATGGTTTTA ATCCTTTTAA TTTTCTCATT TCATTGCTTA CTTCATAAAG 300  
 10 AGAAATTAAT TGATTTGGAT TTTGCTCAAC TGGACGCTTA TTATGCTCTT CTGACGTAGA 360  
 ATTAGAATTT AATTGATAAG GTTCAATATC TGCTAACATT TCTTTTGTTA AAAATCGTAC 420  
 ACTTAGCACC TTTTTCGATT GTTGATCAGA ATACACTTGT GCATATATGT CGCCATATTT 480  
 15 AATCaGTGTT TGTGTTTTTA AATCTTCATC TGAAAGTTCA AATTCATATT TTTTACCATC 540  
 AACTTTAAAG GACGGTCTG GATTAATACT TGTATGATTA AAAATTTCTG CAGAATGTTG 600  
 20 TCCTATTTTT AACGGACTAA CATTGACTTT CTCACCTGTA GCATACACTG AAACGATTTC 660  
 TTCACGTTTA GTTGAAACAA TGTAATAACT GTTTTTGTCT TTAAACACAT AATTTTTGTA 720  
 rCCATCTCTA AAAGGGTAGA CrCGATCTGC TTGTCCAAAT T 761

25 (2) INFORMATION FOR SEQ ID NO: 635:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 827 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 635:

nTAAATATAT TTATATATTA TAGAATAGAA AGACCTGAAG ATTGAATATC TTTCGCAAAG 60  
 CCTTTAACTG TATCTACTGA TAATTCGTTA ATATCGCGAC CTAAGTTTGT ATTCACTTTT 120  
 40 TTCACAACAT CTGCTGGGCA TGTAATAATA TCTGCACCAA TTTCATCAGC TTGAATCACA 180  
 TTGAATAATT CGCGGCAACT TGCCATAAT AATTTAACGC CGTCTTACT ATGCGTAACT 240  
 TTnACAGCCT CTkTCATTAA TGGTaATGGA TCTACGCCTG TAtCTGCAAT ACGTCCTGCA 300  
 45 AATACTGAAA CATATGTTGG CACACCTTCA GTTACTGCTT CAGTTATTTT TTTAACTTGT 360  
 TCAATTGTGT AAACAGCCGT AACGTTTAAT CTCACATTGT CAGCTGAAAG TTTTTTAATT 420  
 AAAGGAATCG TTGATTCACC TTTTGTATTT ACAATAGGAA TTTTAACAAA TACATTTTCG 480  
 50 CCATATTGTT TTAAATTGTC TGCTTCTTTk TCCATAGTTT CTAAATCGTC TGCAAATACT 540  
 TCAAATGArA TTGAAGCATC TGGAATTTCT TTCACAGCTT CTTCAGCAAA AGCTTTGTAA 600

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TTTTTATAAG CTGCTTTCAT TnCTTCAATA TCTGCACCGk CCGCAAATAC TTCTACATTT 720  
 AGTTTAGCCA TATAAYATAG CCTCCTTGAT TCTTATTAAA ATTTTAACAA CATCTGCATG 780  
 5 KCTTTTTCTT ACAACCATTT GTAAAAAATG ATTTTATTTT CTTtGTT 827

(2) INFORMATION FOR SEQ ID NO: 636:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 636:

TTAGTCGGTA TAACCATCGG CTAGGTGGTT TTTGTATTAA AAAAGTGGAT aCCAAAATTT 60  
 20 ATTAATAATT ATTTTAATGT TAGAAAAAAA CTAAATAAAA ACTCGCTAAT GATATCCAAT 120  
 AATATGTATA CAAAACGAGA CATATATTGC ATATGATTAA CGAGATACTG AAAATATTTT 180  
 ATCACCCCTA AAATGATTAT TCATTTTCAG CGGTAATTCG ACCTAAAGTC AAACCTTACAA 240  
 25 TAAAACCGAT GATAAATACT ACTAATGAAA CGAACCACAT CACGATATTA GTTGGTAAAC 300  
 CTGGAAATAC TGCAAAGAGG GAGCCAACAA CAAAACCAAT GATTAATGCA AAAGTCATTA 360  
 GTTTATGATG TGTTAGGAAA TACTGGATAA TTTTGCTTGA AATAATGAAT CCAGCAAGCA 420  
 30 CGCCAAATCC GACTGCAAGT AATATAGGAA GACCTGCAAA GTTAAGTTTA ACAACTTCAG 480  
 ATATTGCTAG CATGACCGTA CCATAGACGC CAAATACTAA TAACATAAAT GACCCTGAAA 540  
 TACCTGGGAG TAACATAGCA CTAGATGCAC ACATACCTGC AATAAAATAT TTAATAATAA 600  
 35 GACTAGTTGA TAGAGTAAGT GTTTCTCCAG CATGTTTATC ACCATTATTC ATTAATGTAA 660  
 TAACAATTAA GATAGCGATA CCAGCTATAA CCATCATGTA ATGTYTAGTT GTAAATGACG 720  
 40 TTTTATAGTT AGAAATTTTC AATAAATATG GAACGATACC AATGATTAAT CCACCAAAGA 780  
 AAAACATAGT TGGAATATGG TGTGGGCTTA ATAAATAATT AAAAGATTA CTTAGTGATC 840  
 CCATTGCCAG TAACATTCCA ATTATAATGG GGATTAAAAA TGTAAAACTT GGCCAAAAAC 900  
 45 GTCGTGAGAA TATGCCGCTA ATTGAAGCGA TAAATTGATT GTAAATACCT AACAATAATG 960  
 CGATAGTCCC ACCGCTAACA CCAGGTACCA AGTCACTCGT TCCCATAGCA AAACCTTTTA 1020  
 GAATATTAAT CCATTTAAAT TGTTGCATGA ATAACCTCCTT TCAAACGATT GGAATAAAAT 1080  
 50 CATAAATAGC ATCATACCAT ATTACAAATG TCCTAGTGAA ATGATAACAT ATTTTAAATT 1140  
 CATAAAATCC ATTGAGAAAT TATGTGCACT TATTATCATT TATATTTTAA AAGAGAGCGG 1200

AGGTATAAGT AAGTTATAAT TAACTGAACG CATTATTACA AAGTCTTTTT GACTACAAAT 1320  
TAAAATTATT ATAACTAGT TAAGAAACT TTATATTTTA CGGAGGGAAT ATAAAATGGC 1380  
5 ATCAACATTA GAAATyAAAG ACCTACATGT GTCTATTGAG GATAAAGAAA TCTTAAAAGG 1440  
TGTTAACTTG ACAATTAACA CTGATGAAAT ACATGCGA 1478

## (2) INFORMATION FOR SEQ ID NO: 637:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1995 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:

ATTACAGCAT CTTCTCTAGG TAGATTATTA AAAGATAGAG GTCTAAATGT AACAAATCAA 60  
AAATTCGATC CATACTTAAA TGTTGACCCA GGTACAATGA GTCCTTATCA ACATGGTGAA 120  
GTATTCGTAA nGGATGATGG TGCAGAACT GACCTAGACT TAGGACATTA CGAAAGATTT 180  
25 ATTGATATTA ATTTAAACAA GTTTTCAAAT GTGACAGCCG GTAAAGTGTA TTCACACGTA 240  
TTGAAAAAAG AACGTCGTGG TGATTACTTA GCGGGAACAG TTCAAGTTAT TCCGCATATT 300  
ACAAATGAAA TTAAAGAACG TTTATTACTT GCAGGGGAAA GTACGAATGC AGACGTTGTT 360  
30 ATCACTGAAA TTGGCGGTAC AACAGGTGAT ATTGAGTCAT TACCGTTTAT TGAAGCGATT 420  
CGTCAAATTC GTAGCGATT AGGTAGAGAA AATGTTATGT ATGTTCACTG TACATTACTG 480  
CCTTATATTA AAGCTGCTGG AGAAATGAAA ACGAAGCCAA CACAACATAG TGTTAAAGAA 540  
35 TTACGAGGCT TAGGTATTCA ACCAGACTTA ATCGTTGTAA GAACTGAATA TGAAATGACA 600  
CAAGATTTAA AAGATAAAAT TGCATTATTC TGTGACATTA ATAAAGAAAAG TGTTATTGAA 660  
40 TGTCGTGATG CAGACTCTTT ATACGAAATT CCATTACAAT TAAGCCAACA AAATATGGAT 720  
GATATCGTTA TTAAACGTTT ACAATTAAAC GCGAAATATG AAACACAGCT TGATGAATGG 780  
AAACAGTTGT TAGATATCGT TAATAATTTA GATGGTAAAA TTACAATTGG TTTAGTAGGT 840  
45 AAATATGTTA GCTTACAAGA TGCATATTTA TCAGTTGTTG AATCATTGAA ACATGCTGGA 900  
TATCCTTTTG CCAAAGATAT TGACATTAGA TGGATTGATT CAAGTGAAGT AACAGATGAA 960  
AATGCAGCCG AATACCTTGC AGATGTCGAC GGTATTTTAG TACCAGGTGG ATTTGGTTTC 1020  
50 CGTGCAAGTG AAGGTAAAAT TAGTGCAATT AAGTATGCTA GAGAAAACAA TGTACCATTC 1080  
TTTGGTATTT GTTTAGGAAT GCAACTTGCA ACAGTTGAAT TTTCAAGAAA CGTATTAGGC 1140

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	TTACCAGAAC AAAAAGATAT CGAAGATTTA GGTGGTACAT TACGCTTAGG CTTATATTCA	1260
	TGTTCAATTA AAGAAGGCAC ATTGGCACAA GATGTTTATG GTAAAGCGGA AATTGAAGAA	1320
5	AGACATCGTC ATCGTTATGA ATTTAATAAT GACTATAGAG AACAATTAGA AGCAAATGGT	1380
	ATGGTGATTT CTGGTACAAG tCCAGATGGA CGTTTATAGTAAATGGTAGA GATTCCGACA	1440
	AATGtTTCTT TATTGCTTGT CAATTCCACC CAGAATTCTT ATCTAGACCA AATCGTCCGC	1500
10	ACCGGATTTT TAAATCATTT ATTGAAGCTT CATTAAAATA TCAACAAAAT AAATAAATTT	1560
	GCTAATAAAA CCGGTACTTT CATTGTtAAA CATTGAAAGT ACCGGTTTnT CGTATAATTT	1620
15	TAATATTATG TTAGTGACAA GGTATGAAAT AACAATAGTG ACTTTTATAA TTCTAAGTCT	1680
	CTTGTCATTT CAATCATTTG TGTATAAATG TCATAGTATA CATAATTCAA TGCCATCGCA	1740
	TGTGGTyGGA CAATCTTATC GTAATCTTCA GTGTAGACTA TAGGTcTTGG TGTAGATAAA	1800
20	TCGATAAAAT GTACGAGATG ATCAGGGAAA TCATCTGTTT TAGGTTTGTT GCTTATTAAAG	1860
	ACCACATCGA TATCTAAGTC GATAAGTTTT TGAATATCTA ATGCAACTTG ATyATTATAA	1920
	AATGGTGCGA ATAATAATAC ACGATCAGTT GAGTCAATT CTTTAawkTC TTTAATAGCG	1980
25	TaAGTTTnCG GCTAG	1995

(2) INFORMATION FOR SEQ ID NO: 638:

30	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 1107 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:

	ATTAGTGATG AAAGTCAGAT TGAAGCTTTA TTAACAGCTG AAAAATATTC AGAAATGATT	60
40	GGTGAATAAT CACCGTGTA CTCCTTAATC TAAGATTGAG GAGTTTATTT TTAGTCTGAG	120
	AAAATAAATG ATATGAAAGA AAAATTATTA GGTACTATTA TTTGGAGTAT TGCTACATTT	180
45	TATTATTCAA GAATGATGGA AATAATGAAT TTAGCTATTT TAAAAATAAA AATTGGGGGA	240
	AGTTAATATG CTAAACATTC AAGACGTTAn CATnCTTTCT AAAAAGGAGC AAAAAGCATA	300
	TAACCGTTTC GTAGAATCTG TAGAAAACGG TAATTTACCA GTACTACCAT GTATTGAAAT	360
50	GGATCTAAAA GAGATGCAAG AAGAAACATT AAACCAGAGT AAGATTGGTG GAATGCCATT	420
	TTTAAATCT TTTAAAGATA TACCATTAGA TGAAATAAT GTACCAATGG TATTGCTAGC	480
55	ACAGATTAAT TTGGATGATC TTCCAGAACA ACAAGAATTA TTTCTGTAA AAGAAGGGAT	540

AAACAATATA AACTCAAGGC TTGTTTATAT AAAAGAGCCA ATTACAGATT TATCACTCGA 660  
 AAATATTCAA GCGCATTGGA AGTCATTAGA TGCTGATAAT GAGGATATCC CGTTCAGTGG 720  
 5 AGCATTTTCT ATAGAATTTA GATTGTCGAA ACAAATATT ACATGTACTG ATTATAAGTA 780  
 CGATGAGGAC GTGCTTGCAT TGTGGAATAA AGTCAATCCA TCCTTCGCGC TAAAATCAAT 840  
 GTTTGGTGGT TATGATGAAT TGATGGAACC TGTGTGTAmC AywTTTACTG CTAAGgAACC 900  
 10 ATTTAATCAA CTTGGTGGTT ATCCATATTT TGACCAAATA GATCCAAGAA CGAACGATCa 960  
 AGAACTGAAA ATGTATGATA GAGTCTTACT GCAAATTGaT TCTACAAGAG ATGGTAATTC 1020  
 15 TTCGATTATa TGGGGTGaTT TAGGTATTGc CAATATCtTA GTGaAATCTA CTGrACCTTG 1080  
 aGGcTATGaa GTTTTGAATG ATTACCT 1107

## (2) INFORMATION FOR SEQ ID NO: 639:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 904 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

ATTCATATTA TTATAAATTA TTTCTACACC ATCCCAATTG AGTTGTTTTT CATAATTTAA 60  
 30 ATGTAATTCC ACTAACTCCC TACCAATTTT AACAAATCCA TATACATCCT TTAATATCGG 120  
 TATTCGCGGA AAACCTTTAC TCAAATCACT TGAATATTTG TTCACATAAT ATTTATGATG 180  
 35 CAAAATTGCA TATATATAAT ATACTATCTC TTCTGAATTA AGATTIATTT TCTTTTTTAA 240  
 AGAATTAGgA AATATTATCT ACaTGCCTCA AACTATCTTT ACCTTTGtAT GTAGCAAAGC 300  
 CTTkGCCATT ACCAATAAAa TGGAaATTAG GTAATATGTC CGTGATCATA GCCGAGAATT 360  
 40 CTTTATTTCAT TCCCTGTCCT TGTATATAAA TCACCTGTCC AGTATTCTCC ATTATATTAT 420  
 AATATCTACT TGGCATTTC ATAAATATTT TGTCGTACAC TATCCATTTT TTTGTAAATG 480  
 GTCTATGCAT AAATTTAACA ATTCTCTCTG GATTAATTGA AATATTTTTT CCTTTAGAAA 540  
 45 ATTTTTGGGT AAGTCCTCGT GTCCAACTaA TaAATGTTTC ATCTTTGTTC ACTAAATTTA 600  
 TACGTTCTCT TGAATCTAAG ATATCAATTA ATCTATCTAT TTCAGAATTA TAGTTATCTA 660  
 CAAGTAATTT TGcATTTACT AATGCTTTTT CATTCGAAAA ATTTGTTACC CAATTATCTC 720  
 50 TTGCTGaATT TACTCCATTA AATkgAkCTA AATATATAGA ATTTCAATA TCCTTGGAAT 780  
 CATACATTGG TAAATAATTC CCCATAGTTT ATGTCTCGGT GATTAATCCA ATCATTGGGG 840

AAAG

904

## (2) INFORMATION FOR SEQ ID NO: 640:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 640:

CGATGTCCTT ACTATTAGAC TTAGCCATTG GTTTCACCTC TCCAAAAATT GTAAATGTGT 60  
 ATCATCAATA TGAAAGTTAC ATAAACTGA CATATTTCTT TAAATATCA ACGCCATTGA 120  
 TAACTTCCTG TTTTAATTGA TACGCTGTAA CAAAATACTA TAGTTAGTGC TTACATGTAT 180  
 ATGTTAAAGC AAGCAGTGGT AAATGTAAAT TATAATTATT CATTAACTTT GCAATATATT 240  
 AAATCTTTTA TTCATAGAAG ATAAATATCA AATCAATCAT AATTATTTGA CAACAAATAG 300  
 CTAACGATTG TTTTAATCTA CATTGGCTT ATAGCATTTT AAACCTATAC TCTATTTTGA 360  
 TACAATATAA GTGTAAATC AATCATAAAA AGGATATTCA ATATCTGCAT CCAAGAAAAA 420  
 CATTACAATT ACCTTT 436

## (2) INFORMATION FOR SEQ ID NO: 641:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 442 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 641:

GTTATTAAAT TCAGAGTGGT AGCAAATTAA AGTTAATCAA GAGTTAAGAT GAATTTAATT 60  
 CATGAACACG TCTATTATTT TTATAATTGT AGCAAATAAA GCTTTACATC AAGGAGGTAA 120  
 TTAAATATGT TCAAAAAATA TGACTCAAAA AATTCAATCG TATTAAAAATC TATTCTATCG 180  
 CTAGGTATCA TCTATGGGGG AACATTTGGA ATATATCCAA AAGCAGACGC GTCAACACAA 240  
 AATTCCTCAA GTGTACAAGA TAAACAATTA CAAAAGTTG AAGAAGTACC AAATAATTCA 300  
 GAAAAAGCTT TGGTTAAAAA ACTTTACGAT AGATACAGCA AGGATACAAT AAATGGAAAA 360  
 TCTAATAAAT CTAGGAATTG GGTATTATCA GAGAGACCTT TAAATGAAAA CCAAGTTCGT 420  
 ATACATTTAG AAGGAACATA CA 442

15	ACTACTGCCA ATAACGGAAG ATATATTTAT CAAGCTGGAA CTTCATTAGC CACACCTAAA	180
	GTTTCGGGAG CACTAGCTTT AATCATTGAT AAATATCATC TTGAAAAACA TCCAGATAAA	240
	GCGATTGAAT TGTTATATCA GCATGGGACA TCTAAGAATA ATAAACCATT TAGTAGATAT	300
20	GGGCATGGTG AGCTTGATGT GTATAAAGCA TTAAATGTAG CAAATCAAAA AGCAAGTTAA	360
	TAAATCAAAG GAGTTTTTGA TTATGGCAAA ATTAGTTACT GAAAACATTT CGAAGCGGTT	420
	TAAAAATCAA GATGTATTAA AGCATATTAA TATCACTTTA GAAAATAACG AAGTTTATGG	480
25	ATTACTTGGT ATTAATGGAG CCGGTAAAAC GACACTTATG AAAATTATAT GTGGCATACT	540
	TCAACAAGAT TCAGGGGAAA TTAAATTAGA TAATAGACCA ATGACACGAA ATGATTTGCA	600
	CAAAGTTGGT TCGCTTATTG AAACACCTGC GACATATAAT CATTTAAGTG CACAAGATAA	660
30	TTTGAAAATT GTGTGTTTAA ATGAAAGCGT TGATTTCaGC GAAATTAATA GTGTTTTAAG	720
	CTTAGTCAAT TTAAATGTCG ATAAAAAGAA AAAGGTTAAG GACTTTTCTT TAGGTATGAA	780
35	ACAAAGACTT GGAATTGCAA TGGCaTTAAT TAAAAaGCCA GAAATTTTAG TATTAGACGA	840
	ACCATCTAAT GGTTTAGACC CATATGGAAT CCAAGAAGTT AGAGAAGTTC TAAAATTATT	900
	AACAGAACAA GGTACTAGTA TTATTATTTT AAGTCACATT TTATCTGAAA TCCAAGTTTT	960
40	AGCAGATCAT ATCGGTATTA TTCATGAGGG TGAGCTAAAA TATCAGCAAA GAAATAACAA	1020
	AGATGAAAAC TTAGAAGAGA TATTCITCAA AATAACGAAA GGTGATTACA AATGATACAT	1080
	TTAAAGATaG AAGGTATCAA ATTTAAAAAt TCTTTCAGTA TGTATGTTTT ATTAATAAGT	1140
45	CcGcTGGTAT TTCTTTGTTT TGCTATTTTC ACAGTCTTAT TCGCCAAAAG TAATACGGGA	1200
	ACAGCGAATA GTGTGTCACC ATATATAACT TTAGTATTTA ATATTTGGCC AATTGCTTTC	1260
50	ATCCCGATTG TATTATGTAT GGCTTGTAAT TCGTTATTTA AAATTGAAAT GAGAAATAAA	1320
	TCATTTAATT ATTACTTAAG TAATAATTGG TCGATTACAA AAGAAATAAG AGCAAAGATT	1380
	TTCATTTTAT CAATAGCATT TTTGGTACAT TGCTTTTTAG TATTTATTAT TGCTTATATA	1440
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TTGATGTATG TAGTATCTCT ACCATTGATA CCGCTCAACT TTTTATTAAC TCGATACTTT 1560  
 GGTGTGTTTCG TATCAATATT AATAAACTTA GTATTATCAG TCATTGTGT CTTGTTTTTA 1620  
 5 ACATTGAAGA GTTTATTTTG GGTGTTGCCG TGGGGGATAA TGCAGAGAAT CCCGCTTATT 1680  
 ACGCTTGGTA TACTACCTAA TGGcTTAGTT GTAAACCATA ATTCAAAATA CTTTAATGAT 1740  
 10 CTCAATGCCT TATATATTTT GATTATTGTT AGCATCATT TTTTCGCGAT AGTAACATTT 1800  
 TTAAATAATA AGAAAAGTTG GCGATTAAAA TGATAATTAA CGAATTAAAG TCATGTAAGT 1860  
 TGAAATTTTC TAAGCAAGCG CTCACATTTG TACCCATTAT TGTAAACCATA TTGTTTATAT 1920  
 15 TATTTATAAA TTGGTATTTA AACGTAAATT TATGGAATGG TCGACAAATm AGTTTGTTTA 1980  
 CAGCGAGTTT TAATGCAATT ACATCGCTAT TAATTTCTAT AAACGTCTAT CAAGTTATCA 2040  
 ATTTTGAAGA AAATATTGGT CACTTTAATC ATATTTTAGG AAAAGCTAAT AGGCTAAATT 2100  
 20 GGTAAATGC ATCAATGATT TTTACTTATA CTATTACAGC CATATGTATT CTATTAGCAT 2160  
 CAATTAATTT ATTGTGGCAT TCACATGATA TGAAAATAAC ACTTATGTTT ATAGGcGTaT 2220  
 CATTGTTTTT CAATGTaATT ATATTACTGC TACTTTTTAT TTTTAGTATT TTCATTAAAG 2280  
 25 ATGTAATGGC TATTGTGTC GGAGTTTTAA TGTTTATTTT TAACGTTTAT TTTGGATTAG 2340  
 AAGTGCTTGG AGATCATTCG TGGTCTATT TACCAATCAC ATATGCTACA CGTTACGTTT 2400  
 30 ATATGTTTAn CGAAGGGGAG TATACCAGTT ACATTAACAT TGGGCAATCT ATATnATTAT 2460  
 CACGnTGCCG AT 2472

## (2) INFORMATION FOR SEQ ID NO: 643:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 646 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 643:

45 ATAATATAGG AATTATTTTCG ATnACAGATT TTACGAATCG TGCTACGATG CAAAATGAAn 60  
 ATAAAGATCC ATATGGCGAA AAGTTAGCTT ATGGAATTGC TTTTAATGGC AGTGTGGATA 120  
 TGCAAGGGGA TAAACAAGTC ACAATTCCAA AATATAGTGT AGTTACAATT ACTGGCGAAA 180  
 50 ATAGTAAAAA TTATCGTGTT ACCGCCGATA ATAAGACTTA CTATGTTAGT AAAGATAAAT 240  
 TAGAATATTT TAACCCGGCA GGTTTATATC AAACGCATAG TTTTAAAAAA TTAGCACCAT 300  
 ATATGAAATC AAATTATAGT AATTACTATG CATACTTTAA TAGTCAATTA CATAAAAAGC 360

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CACAACAACC GATACAATTA CTTTCAATG ATAATAATCA GTTATACGGT TTTGTTTATC 480  
 CAATTGTAGA TAAAAAAGAA TTAAAAGATA AGTTTAATAT TAACAATAAC ATTTGGATTA 540  
 CTAAAGTTGG GAATGGATAT TGTATTGCCA ATTTGAAAGA AGACAAATGG ATTTATATTG 600  
 AATTGTAGGT GTAAAGATGC TAGATAATAT TATTTTATAT TTAAAA 646

(2) INFORMATION FOR SEQ ID NO: 644:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:

TAATATCGGA ATTTGATAAT GAAGATATCT AATTTTTTAA TATTCGTAGC TTTTATTTTT 60  
 CTACTTATTT TATGTTTATT TTAAATCTTA CAAATGACAA ACCATTAAAA GTAGCATCCC 120  
 AACATCAAAC AAAAAAACAA TTCATCAAAT AAAAATCGCT ACAAACCAA GTCATTAAAC 180  
 ACGCAATAAT TAAATTTTC CACTCATTAT AATTCTGAAT TCCAAATGTC GAATTCCGAA 240  
 AACCAAATC CAAATTCCAA AAACGCAACT CCAAAATTAA AAGCATTTCCT CTACCATTCC 300  
 GGAAATGCTT TTACATACT GgATTACTCT GTCATTAATG ATTTTACAAC GGgAAACCAT 360  
 GTCGtCATGT ATGACCaaAG TAGCGTCGCT AtCaTaAgGt GGTTCGGATC TTTATTGGAT 420  
 AATnAT 426

(2) INFORMATION FOR SEQ ID NO: 645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:

nTTATTTACC CACAACATGT TGCGACATTA GGTAATGGG TACCTTATTT ACTTGGTATT 60  
 GTTATGTTAG GTATGGGATT AACAAATACA CCTAATGATT TCAAAATGGT CTTTAAAGCA 120  
 CCTAGAGCAG TAATTATTGG TGTCTGTCTA CAATTCAGTA TTATGCCAC ATTAGCATTT 180  
 ATAATTGCAA AGTCTTTTCA TTTACCACCT GATATTGCTG TTGGCGTAAT ATTAGTTGGA 240  
 TGTGTCCGG GTGGGACATC AAGTAATGTA ATGAGTTATT TAGCCAAAGC TAACGTAGCA 300

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	ATATATCTAT TTGCAAATGA ATGGTTGGAA GTATCTTTCC TGAGTATGTT GTGGTCAGTT	420
	GTTCAGATTG TATTAATTCC AATTGCTTTA GGTATTGTTT TGCAAATTAT TAATCGTAAA	480
5	ATTGCTGAAA AAGCTTCTAC AGCTTTGCCA ATTATATCAG TTGTTGCTAT TTCATTAAAT	540
	TTAGCAATAG TTGTAGGTGG CAGTAAGCAC CAAATCTTAA CTACAGGATT ATTAATATTT	600
	TTAGTAGTTA TTTTACATAA CGTATTAGGG TATACGATTG GATATTGGTT AGCTCGTCTT	660
10	TTAAAATTAG ATCGACAAGA TCAAAAAGCA GTCAGTATTG AAGTTGGAAT GCAGAACTCT	720
	GGTTTAGCTG TGTCATTAGC aGCATTGCAT TTTAATCCAA TTGCAGCAGT ACCAGGCGCA	780
	GTGTTTAGTT TCATTACATAA TATAACAGGG CCTATTTTAG CAAAGTATTG GTCAAAAAAG	840
15	TTATAATTGC ACTAATAGAA TGAAGTGGTC ATCGGACTAT GTTAAGCTTT GATAAAGAGA	900
	AAAAATAGAG GAGTAAATAT ATGTATAGAG CAGTTATATT TGATTTGAT GGAACAATAA	960
20	TAGATACGGA ACAACATTTA TTTAATGTTA TTAATAAACA TTTAGAGATG CATAATGCCG	1020
	ATCCTATAAG CATTGATTTT TATCGTTCTT CTATTGGAGG AGCAGCTACA GATTTGCATG	1080
	ACCATTTAAT TAAAGCGATT GGTTCCGAAA ATAAAGATAA ACTTTATGAA GAACATCATC	1140
25	TTACTAGTAC AACATTACCG ATGATTGATA CGATTAnATC ATTGATGGCA TTTTTAAAGC	1200
	AACGTCACAT TCCTATGGCA ATTGCCACAA GTAGTGTGAA AGCGGAAATA ATGCCCCACCT	1260
	TTAAAGCATT AGGTCTAGAC GATTATATAG AGGTAGTTGT TGGTAGAGAm GATGTTGAAC	1320
30	AAGTTAAACC TGACCCTGAA TTATATTTAT CTGCAGTACA ACAATTAAAT TATATGCCGA	1380
	CACAATGTTT GGCTATTGAA GATTCTGTAA ATGGTGCAAC AGCCGCGATT GCAGCTGGAT	1440
	TAGATGTTAT TGTTAATACG AATAAAATGA CAAGCGCACA GGACTTTTCT AATGTAGATT	1500
35	ATGTAGCAAA AGATATTGAT TACGATCAAA TTGTAGCGCG TTTCTTTACG AAATAGGAGG	1560
	CGTATCATGA TGGGTTACAT TATATTGTTT TTTCTAGCTG GTCCAGTAAT TTTAGGCGTT	1620
40	GGAAATTTGG TGATTGGTCC TATATTTAAC AAACAGACAC CATTTGCGGT GCAAGTAAGA	1680
	TCTTTTGTG kTGgkTcmAT GrTTTACTTA ATACTCGCAA CAATTGGCTA TTTTTTACTA	1740
	TTACAAGGTA AACTTTAAG AGAAAACCAC CTTACCTCAT TAAATGGACG ACCATATGTA	1800
45	TGTGAAATGG TAGAACGTTT ATGTTTATGT ATGAGATAGG GTGGTTTAAA TAGTTACATA	1860
	TATTTTAATA ATAACGTCAC GATGATAAGT ACAATTAAGA TAATATCTAT GCCTACCATA	1920
	ATTGTAGCTC TTGTTGCAIT ACTTCCTTGT TCTTTTGCTG ATTTCATAGC ACGGTAGTTT	1980
50	GGCACAAAGC TAATAATTAG TAAGATTAAT ACAATTACAC CAATTAATGC TGTGTGCATG	2040
	ATGAACGACC TCCTTTATTT TTTTCAATCA ATTCCCAAAT AAACGTAGCA ATCACACCGA	2100

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## EP 0 786 519 A2

CAATAATTAA TGCAATCGGT AAAGTCGTAC CGAGTTTAAT CTTGCGCTCT GGAGAATTAA 2220  
 TAATAGTAAA TACTGTAAGA CAAATGAGTA TGAAAGCAAG TGTGCAATA ATAGTTCTTC 2280  
 5 CAACTAAATA TAGGATGTCA GGTTTTTCCA TACCGATATA ATTTATGATG AAAAATGCTA 2340  
 CAGCAAAGAG TACCGATATT TTTGTAGCAC GTAGCAGTAT TTGTTTTAAC ATTGATATAC 2400  
 TCCTTTTTAA TATTATTAAA ATTATATCAT AATTACCAAG AATAGCTGAA GTTGTATGTG 2460  
 10 ACTCAACGGT ACTTGAGCAA CTTTTTTAAT TTTTAGAAA AATCACAAAA TAATTGTTTG 2520  
 CAAAGTTGCA AAAGCCTGCT ATAGTAGTTC TGTAACGAT TGCATGGTAT GCAAATATTA 2580  
 ATGTACCAAA ATCGATAATT TATAGTATAA TTACGGCAAT AAGTTTTTTT ATGGATTAT 2640  
 15 TTAGTATCAA TCAGAGATGG GGTAAGAAGT TATGGAGAAC AATGAACTAC AAAGGGGATT 2700  
 GAGTGCCCGT CAAATTCAAA TGATTGCACT TGGTGGTACG ATTGGCGTGG GGCTTTTCAT 2760  
 GGGTGCGACA AGTACAATTA AATGGACAGG CCCATCAGTT ATCCTTGCAT ATTTAATTGC 2820  
 20 GGGTATCTTT TTATTTTTAA TCATGAGAGC AATGGGGGAA ATGATTTATT TAAACCCTAC 2880  
 AACAGGATCA TTTGCAACAT TTGCAAGTGA TTATATACAT CCTGCAGCAG GTTATATGAC 2940  
 AGCATGGAGT AATATATGCC AATGGATTGT AGTTGGTATG AGTGAGGTCA TCGCAGTAGG 3000  
 25 AGAATATATG AAGTTTTGGT TCCCGGAATT GCCAACTTGG ATTCCTGGTG TTATTGCTAT 3060  
 TTTATTATTA ATGGCAGCGA ATTTATTCTC GGTAAAAGCG TTTGGAGAAT TTGAATTTTG 3120  
 30 GTTTGCTTTA ATTAAAGTTG TAACAATTAT TTTAATGATT ATTGCTGGTT TTGGTCTTAT 3180  
 nTCTnTGGT TTTGGAAATG GTGGCCATGC GGTAGGTATT TCTAATCTAT GGACAAATGG 3240  
 C 3241

(2) INFORMATION FOR SEQ ID NO: 646:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 646:

AGGCGTCAAC TCAGATGGTT TAATAATTGC CGTATTACCT GCTGCAATAG CACCGATTAA 60  
 AGGTtCGAaC ACTAGTtGAA AAGGATAGTT AAATGGTGCA ATGATCAAAA CtGTTCCATA 120  
 50 AGGTTCTTTT TTGATATAGC TTTTGTGG AAATAAATAT AAAGGTGTGT CTACATTkTT 180  
 TGTTTTAGTC CAGTTTTTAA GTTCcTTACG GGCAATTTTG ATACTTyTCA AAGTTATGCC 240

## EP 0 786 519 A2

	AATATCGCTC TCGTATGATT TAATAGCTTT GCTTAACCTC TTTAATTGCT CTTTTCTAAA	360
	ACTAATATCT TTAGTTTGTT GTGTATTGAA AAAAGCTTTA CTGTCATAAA ATTTTGTCTC	420
5	AATGATATTC ATAATGAAAA GAACCTCCTT ATATGATTAT TTTGGAAAAA GCGATTAAAT	480
	GATTTGAATG TTGTGGCCGT TAATTTTAAA TGGTCTTTCG AATTATATAT GTTGAAAGTT	540
	GAAAATAGAG CGATGAATCG TGTACATAAT AATATTTATA ACTTTAATCA TAACGAAAAA	600
10	GGTAGGAAGA AAACAAAAAT TTATACTCAA CATCGCAAAT ATTTTAAGAA AATGTAAAGA	660
	CAAAAGGGGA ATTGTATAGA AATCACTAAT CTGTGGGTTA GGGTAGCTAA AGGAATAAAA	720
	ACTACTATTG AAAAAGGGTT GTAAATTAGT CAAACGTAAA TAAAAACAG TTCATTGAAA	780
15	GTGAAATAAA TTCTACTTTA ATGAACTGTT AGTTAAATAC AACATGTCTA TAATTAGACA	840
	GTAATATAGT ATTATTTTGT TAATGCTTCA GTGATTTGAG GTACGATTTG TTTTTTCGA	900
20	GAAACGACAC CAGATAAGAA GGCCATGTCA TCTTCTAATT GAACATTGAA TGTCGCCAA	960
	CTTTATCTTT TTCAGCACCT ACAACTAAAA TTTTAGAATC ACTATTAATG ATGTCAGTAA	1020
	CAACAAGTAC AAATAAGTCA TATTTTTCTT GTGCACTTAC AGCTAACATT TCTTTTTCTA	1080
25	TATCTTCTTT ACGATTAAAC ACTTCGTCAA GGTCAACAGC ATTAACCTGT GCAATACGAG	1140
	TCACATAGTC ACCCATAGTA AATGATTTAG CATCCATGTT TAATAAGAAT TCAACTGATT	1200
	TATCAGTTGT TGAAGCACCT GCTTTTAAACA TATCTAAGCC GTACTTTTGA ATATCAACTT	1260
30	TAGCAATATC TTTAAATTCT TCAGCTGCTT TAACATCTTG TTGTGTACAT G	1311

(2) INFORMATION FOR SEQ ID NO: 647:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 1498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:

	CATATACTTT TTCATTCTT TACGAGATAC TTTACCAGAG GATTTAGACT TCATACGCTG	60
45	ATCCATATGT GCTTGCCTT CAGaATGTCC ACAAACACAA CGATATACCG CTCCTTTCCC	120
	TTTACCAAAC AACGTTAATT TCTTTTTACA GTTTGGACAT CTGCAATTG TTTTGGCTG	180
	TACATTCTTT TCGTCTTAC AAGATGGATC TTGGCACACA AGCATCTGAC CATTTTTAGT	240
50	TTTAACTTTA ATCATGAATT TACCACACGT TGGGCATTCT GTGGTTGTTA AATTATCGTG	300
	TTTATATTTA CGATCACTAT TTTTAATCCC ATTTACAACA TCTTTCGTAA AATCTTTCAT	360

CCATTGTGcA GTTAAAAGTG GCGACGTAA TTCTTCTGGT GCTAATTCTA ATATTTGTTT 480  
 ACCTTTTGAC GTTACTTTAA TTTTACCGTC TCTTGATTCA ATGGCATICA TATTAAATAA 540  
 5 TTTATCGATA ATGTCGGCCC TTGTTGCAAC TGTGCCGATA CCACCTGTTT GTTTTAAAGT 600  
 TTGCGCATAT TTTTATCCT TCAATTGAAT AAAGTTCTGA GGGTTCTCCA TCGCTTTTAA 660  
 TAACGAACCT TCATTAAAT ATTCTGGAGG TGTGTTTCA TGTCTCTAA TATTTGTTTT 720  
 10 TGAAATCTTC ACTTCATCGC CTTCTGAAAA AGGCTGTTGC ATCTCTGTAA TAGATTCAAC 780  
 TTGTCTAATA GATTTAAAC CTAAAACAGT TGTTACATTC TCTTCAAAA CAAATGTGTG 840  
 15 CCCTGCAACC TCTAAAGTTA CAGTTATCGC GTCATACTCG TCGGAGGCA TTAAAGCTTC 900  
 TAAAAACGC TCGACAATCA TATCGTATAA CTTTAATTCT CTATTACTTA AGTCTGACAT 960  
 GACAGGTCTC ACTTCTGTAG GAATAATTGC ATGGTGATCA GATACTTTTT GATTATTAA 1020  
 20 TATCGACATT TTTGATGAAA ATGTTTTAGA CATTAAATGGG CGTGCTTGGT CTTTATATGT 1080  
 TGTTGCCATC GTCACCTGAA TACGTTCTTT CATAGTATCT ACCATATCAG TTGTTAAATA 1140  
 GTTTGAATCT GTTCTTGAT AGGTTACGAC TTTATGTCTC TCATATAAGC TTTGAAGTGT 1200  
 25 ATTCAATGTT TCTTTAGGTC CAATTTTATA ACGTCTATAC ATATCTTGTT GTAAATCTGT 1260  
 TAAATTGTAC AGTGATTGCG GATACGACTT CTTATGTTA GTAGCAACAG ATTTAATCTT 1320  
 ACCATCGACA TTTTCAAAT TATTAAACCAT CTGTTCTAAA GTTCTTTAw TGGtATATCG 1380  
 30 CTGATTTGaw TCTAGCTGAA AATCAAACCC TTTTACCGTT AATGATAATG TAAAGTATTG 1440  
 TTGTGGnTTG AACTGATTAA TCTCTTGTTG GTCGTGTAAT TTAATAAATT GAAACGGn 1498

35 (2) INFORMATION FOR SEQ ID NO: 648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1044 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:

TAAAACAATT CGTTTTATTA ATACAGTTTG TAAAAGTATT CTCTTAGTAC TAATAGCTAA 60  
 TGTAATGATA GAAATACTA GTGTTATTAA AGATTGAAT AAAATAAAAG AAAGTGAAG 120  
 50 ATATTGGAAT GTATTAGATG ATTATTACAC GATTGAATTT GCACCTTATC ACGAAACAAA 180  
 ACAAAGTTTG ATTGATAATA TGGTGCGATC AGAACAATTA GTAAAGGCTA GTGAAGCAGA 240  
 AAATAATGCG ATTTTATTCA AACCAAAGGG TGAATCCGTT GACAATGACA ACTTTTCGCC 300

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TCAACCTGAT ATTCCGATAA AAAATCAAAA AAATAATGTC GAAGTAATTA TTCCACAAAA 420  
 GTTTCATGCA ATGCGTAATG AAATCAATCA AGCATATCAT TCATGGTTTG AATTTGTACA 480  
 5 AAATAAAAAAT AATAAGAGA ATAAGTTATC TATACAGTTT ATCAACAAAA ATGATTGTCTG 540  
 AATTTTTTCA TTTGATGCAC GAGATAGTCG CCATTTGTCA TTTATAGAGG CGCCAATCAT 600  
 TGTGAATGTT CAGGCATCAG ATTTATCGaA TGATTTtAT TATGCCATGa TCaGTCaAGG 660  
 10 CGGGTATTTa TTCaAAAAATT ATGaCGCGCT AGTAAAAAAT ATTGGAAAAG TATCCATCTT 720  
 GATGGGGAAA TCCAGTGGAA TAACCAATTA TAAAGATAGC GTGATGGAAA TGTATCATGA 780  
 AAACAATTTG AAATTAACAG TACTCAACTT TTCACAAATC ATTATCGCAA TCATTTTAAT 840  
 15 AATTATTATT TTATTTGATG TGAAATATTA TTTTGAACAG CATCGAAAAT TACTCGTAAT 900  
 CAAAAAGCTA TATGGTTATT CAACATTAAG AGCCAATTAC CAATACTTAT TAATAAATAA 960  
 20 TATAGTTGTT ATTTTATTG GAATATTGAC GAATGTAATT TTACATTCTC ACTATATAAT 1020  
 GATGTTATTT GCAACGATTC TTGT 1044

(2) INFORMATION FOR SEQ ID NO: 649:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:

35 GAACATATTG GGTATGCAA GGnGGTCACT CTTCACTT ATAAACAACA TTTTAATAAT 60  
 GTAAAGTTTA ACCAGCTAAC ACTTTTGTTA GCTGGTTTTT ATTTTCCTTC AATTTTAA 120  
 TGGTTAAGTC CCCTCTATA TCTTATAAGA CAATCATTAT AATCAATTCA ATTAATACAT 180  
 40 TAACAACCAC AACTAATAAA TATAGTAACT TCAAAATCCA TATTTATGTC TAAAGATAAT 240  
 CTCAATGTTG TTCACGTCAA TAAAATTATC CCTAGGTTTT TAAAAATTGT ACATGTTTAA 300  
 ACAATCAAAA GTGTACATTA TTAAATTATC ATTTCCAGTT AGATTTAGAA AACATTCACA 360  
 45 CCACGCATGG ACCAACGTAT TCGTCTTcAT TcATTTTAG 399

(2) INFORMATION FOR SEQ ID NO: 650:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55 (D) TOPOLOGY: linear

	AGACGAGGAA CATGATTCAC ATGAAACACC ACCTTCTCGA GTGCGTTACG CATTTATTAT	240
10	GACCATGTGT GGTATTCACG GTACAATTC ACTTTCAATG GCACTTACAT TACCATTTAT	300
	CATTACAAA GGACAAGCAT TCGAATACCG TAATGATTTA TTGTTTATTG CATCTTTCAT	360
15	GGTATTAATT AGTTTAATCT TAGCGCAAAT TGTTTTACCT TTAATTACAC CATCTGCCGA	420
	AGATACTACT TTAAAGGTA TGACTTATCA ATCTGCCAAA ATTTTCATTG TTCAAAAAGT	480
	GATCCAGCAT TTAAAAACG AAAGTAAAA AGACAAAAC GATACAAATT ATCGCCCAGT	540
20	ATTAAACCAA TACTATGGAG AATTGTTATT TTTATTAAAT TCAGAACCTG ATAATCAAAA	600
	TACrAAAGaa CTCAAACGTT TAGAAGATAT TGCaAAAGTA ATCGAAACAT CTACACTTGA	660
	GCGTTTAATT GATAAAGGTA AGGCAACATA TCAGGATATT AATAATTACC GCAATATTGT	720
25	CGAATTAACA GAGACACACC GTACTGC	747

(2) INFORMATION FOR SEQ ID NO: 651:

	(i) SEQUENCE CHARACTERISTICS:
30	(A) LENGTH: 1373 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:

	ATACAATACT CTTTATTAT TCAATAAGCC ACTTCCTATA GCAAATGTTT AACTTTAAAT	60
40	ATTTTTCGAT GCTAACAAA AATCACACTA TCATCTTTTA AAATGAAAGT GTGATTACAA	120
	GCAAATCTGT AAAATTTATA AAGCAGAAAC AATTCAACTT TATCATTATG ACATTTCAAT	180
	TAAACCTTCT ACATTATAGT TCCAAGCATC TTACACATGA ATGCAAGTAT TTAACGATTT	240
45	AATTGTGACA TAGCCTGTTG ATATTGTGTT TCATTGATAT AATTTTGTTG CTCATTTTTT	300
	TCTAAGTTCG TGCTTACACG TTGCGTAAAA TTCTCTGACA TATTATTGAT ATTATATACG	360
	CTAGGTGCAT TGACTTTACT AGCTAAAATA GCGCTTTGTA AACTGTTAT GTGAGACATT	420
50	GTTGTACTAT TTTTATTCAC GGTGTTCCA AAGTAATGGT TTGCTGCGCC CTCAAGCGTA	480
	TATTGATTAT CCCCAAAGTA AATATTATTT AAATAAAGC TTAAATTTTC GTTCTTATTA	540

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TCATTATCAT AAAAATAATT TTTGACAACT TGTGTGTGTA TGGTACTACC ACCTTGACACA 660  
 TCTCTGTCGC TAATCGTTGA AAATAAAGCT CTAGTTGTAC CTTTCAAATC GAATCCATGA 720  
 5 TGATTGTAGA ATCGTTCATC TTCCATTGAA ATAAAGGCAC CTTTAACATA CTCTGGCATG 780  
 TTATCAGCTG ACACAAAAC TCTTTTATTT TCAATTTTTC TTAGTTCATC CACATTATCG 840  
 CGTGTAGATA AAAAATACAT GATACCAATA AACAAATGCGA TAATGATTAG AATGGTTAAT 900  
 10 AATATTTTAA ATAGTATTCG TTTACTTTTT TTCTTTTTTC GCGGTTTGCC AACTGGTTGA 960  
 TAATACGTAT TATAGTGAGG TTCGTGTTTC ATATGCTCAA AATGTTTCATT TGAGTTTGAG 1020  
 15 TACCTATCGC TTCTTTTCAT GCGTTTGCTC CTCTTTTAA AACTCACTTA GtATATACCT 1080  
 TGaGTTTACC AGTACTATCA CAAATAGGCT ACACTTTTTG GGAAAATCAG TCCAAGGGCT 1140  
 TACAATCGTA TACGCCATCA TACTTACTTT TTTGTTTTTT GAAAAAATTA TAGATAAATC 1200  
 20 ATTGCAATTT TAAATATTAA TCATGTCAA TATTGTTATA TTTTATAAAA ATAAAAGACC 1260  
 ATCCCTATTA AATGCCAATA GAGACGACCT TTTATTTGTT ATTCATTTAT TAAAACTAAA 1320  
 ATCCATATTT CATTTCAAAC GAAAATATAT AAATTTTAAC AATCGTAAAC CAC 1373

(2) INFORMATION FOR SEQ ID NO: 652:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 859 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:

GGCAGATAAT TTAGTCATTG TTGAATCGCC TGCAAAAGCA AnaACCATTG AAAAGTATTT 60  
 AGGTAAGAAA TATAAAGTTA TAGCTTCAAT GGGACACGTC AGAGACTTAC CAAGAAGTCA 120  
 40 AATGGGTGTC GACACTGAAG ATAATTACGA ACCAAAATAT ATAACAATAC GCGGAAAAGG 180  
 TCCTGTTGTA AAAGAATTGA AAAACATGC AAAAAAGCG AAAAACGTCT TTCTCGCAAG 240  
 TGACCCCGAC CGTGAAGGTG AAGCAATTGC TTGGCATTTA TCAAAAATTT TAGAGCTTGA 300  
 45 AGATTCTAAA GAAAATCGCG TTGTTTTCAA CGAAATAACT AAAGACGCTG TTAAAGAAAG 360  
 TTTTAAAAAT CCTAGAGAAA TTGAAATGAA CTTAGTCGAT GCACAACAAG CGCGTCGAAT 420  
 50 ATTAGATAGA TTAGTTGGCT ATAACATCTC GCCAGTTCTT TGGAAAAAG TAAAAAAGG 480  
 GTTGTACGCG GGTGAGTTC AATCTGTTaG CmTTCGTTTA GTCATTGACC GTGAAAATGA 540  
 nATTGAAAC TTAAACCAG AnGAATATTG GACTATTGAA GGAGAATTTA GATACAAAAA 600

aAAAGATGTT GAGAAAATTA CAGCTGCATT AGATGGAGAT CAATTCGAAA TTACAAACGT 720  
 GACTAAAAAA GAAAAAACGC GTAATCCAGC AAACCCATTT ACAACTTCTA CATTACAACA 780  
 5 AGAGGCGGcA CGTAAATTAA AcTTTmaAGC AAGAAAAACA ATGATGGTCG CACAACAATT 840  
 ATATGAAGGT ATAGATTTG 859

## (2) INFORMATION FOR SEQ ID NO: 653:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:

20 TTCAACTTCG TTTGGAAATC ATGTTCTCTA ATTGTTGGAC TTAAACGAAT TTCTTTAACA 60  
 TTGATAATTT TTTGTTTCTT TTTCAATTTCT TTTTCTTTTT TCTGTTGTTC GAATTTGAAT 120  
 TTACCGTAAT CCATAATTCT TGCAACTGGT GGTTCGTCAT TCGGTGCAAC GACCACTAAG 180  
 25 TCTAAATCTA CACGTTTCAGC CATTCTCTAA GCTTCACGCT TTGATTTAAC ACCAATTTGT 240  
 TCACCATCTT GACCGATTAA ACGTAATTCT TTTGCACGAA TTTTGTCTATT GATTTGAGTT 300  
 TGATCTTTTG CTATGGTTGA CACCTCCAAA ATTTTACGA AATTGTCACC AAGCAAAAAG 360  
 30 GAAGAGCAGG TATAAAATAC CCGCTCTTCC TTATACACAG TTATGTGTAA TGTGATTAAAC 420  
 CTGCCAACTG CTTTATGCGT CGCTACAGGT GAGAAGCGGG TGCTTCTACT TGGTTCGTTT 480  
 35 CGTATTCAAC GTTATTAATC ATATCAACAA TTCACATTTA AGTCAACACT ATAAGTGTAA 540  
 TTATTTTAT TTAAACCTTT TATTTTCATCC ATTGACACGT CTTGACGTAA ATCTACTTGT 600  
 TCTAATGGAA TTTTTTTCGT TTTATATCGA AGCTTATGAT AAATAAAGAA TGCTAAAAAT 660  
 40 ACTGGAATTC CCATATACGT AATTAAGAAG CGACTAAAAT TAAAATCTCC TGTnTTAATA 720  
 AAGTCAACAT CTTGCCCAAn AAnTACT 747

## (2) INFORMATION FOR SEQ ID NO: 654:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654:

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TTGTGCTTCT TTTTtagCTT CTGAACCTC TTGTGCCTCT TGTGATGTAT CACTyAAAATT 120  
 ATTTGCACTT GCTTCTTCTT TTATCGCTGC TTGTTGTGCT TTCAATGCCA CTGCTTTTGT 180  
 5 TTCTTyATTT GATACAGCCA CACTTTTATC CGCTTCTGCT TGTGCTTCTC TTTTtagCTTC 240  
 TTGAATCTCT TGTGCTTCTT GTGATGTATC ACTTAAATTA TTTGCACTTG CTTCTTCTTT 300  
 TATCGCTGCT TGTTGTGCCT TTAATGCCGC TTGCTCATT TTAGATTGT TAAAAATCC 360  
 10 TTCAACACGT TCTTTTGTAT AGGCAACCGT TTCTTCAAGT TCGTTTTTTC TTTCTTCAAA 420  
 CTTTtGCGAC AGTTCTTGTh CTTTGACTTT nAAATCATCT GCTTTTTTGAT AAACtTTATT 480  
 15 TTAAATACC AACCTAAAGC C 501

## (2) INFORMATION FOR SEQ ID NO: 655:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655:

CACCTTGTCa TAATTAATTT TTTGATTTTT CATTTTACTG ATAATAGGTT CAGCATTAAAT 60  
 CATGATTTAA CCTCCACAT TTAATCATTa ACTTCTATTA TATATGATTc ATATTAAATG 120  
 30 TCAGTCAAAA AAGTTAGAAA TTCATTTTAA TGCATTtATA TTTCGAAAAT CCCTTATGTA 180  
 TCTAAAAGCA TTTTTTAAAC TTGAATTTTA AAACACTAAA CAACACATAC GTCTCTGTGT 240  
 35 CATTTTCATT TTTTGTATGT CATATATATG TTTACTTCAT TTAAATCAAT TTCATCTTAT 300  
 AATTTATCGT GTATTTTACA AAAGATTGAC TTCAATTCAT CGTAAAAGTT ATACTTTTGC 360  
 CATTTTTTAA TGTAACATGG TGTTAGTAAT AAAAATAATA CATTGAGGTG TTTTACATGA 420  
 40 CAGCATTATT CCCTTATATC GCTTTTGAAA ATTCAAAAGA AGCCCTTGCA TATTACGAAG 480  
 AAGTATTTGG TGCAACTGAC GTTAAACGTT TAGAAGTTGG CGAAGAACAA GCGTCACATT 540  
 TTGGTATGAC TAAGGAAGAA GCGCAAGAAG CAACTATGCA TGCTGAATTT GAAGTGCTTG 600  
 45 GCGTAAAAGT GTTATGTTCT GATTCTTTTG GTCGCGCTGA CAAAATTaAT AATGGCATAT 660  
 CATTATTAAT TGATTATGAT GTTAACAATA AGGAAGATGC TGATAAAGTT GAAGCATTCT 720  
 50 ATGAGCAAAT TAAAGATCAT TCTTCAATTG AAATAGAATT ACCGTTTGCT GACCAATTCT 780  
 GGGGTGGCAA AATGGGCGTC TTTACCGATA AATACGGTGT TCGTTGGATG 830

## (2) INFORMATION FOR SEQ ID NO: 656:

55

(A) LENGTH: 539 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10	GTATCCATGG GCCCGTTnCG CACAACATTT GGnACAATTA GGTACACGnG TTGTCaTCGG	60
	TCGTTTCGGT ATAATTTTAT CGAATGaAGG CGGTGCGTTA CAAACAATGA AACTACCATA	120
	CGAATATTAC ATTGGTGGTA AATTAGGTTT TGGTCAACAA TGGTATTCAT GGATTCATAT	180
15	CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT	240
	TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC	300
	TATGCATAAG CCTCATGAAA CTGGGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA	360
20	AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG	420
	aTTCCAATTT AAATATAGTA ATTTAAAAAT GGnACTTGAA GATTTAATTA AAGAATAATC	480
25	AATACCATTA ATGAGCATTa GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT	539

## (2) INFORMATION FOR SEQ ID NO: 657:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

35	ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GAATTATAT TTGGCAGCAC	60
	AACGTATCGT gatGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA	120
40	CAATTAAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA	180
	ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA	240
45	ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA	300
	ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTTGA AGGCTAGATT AAAATCGCTC	360
	AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT	420
50	AAAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTTTGATA TGTATTTTAT	480
	AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA	540
55	GCTCTCGTTT AACTTTATTT AtTCCTCGAA CTGACGTTG AGTTAAACCC AAAATAGCCT	600

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	CTGGTTCAGA AAGCTTTTGA TTAATTTGGA CTTTAAAGTA TTCCCAATTA TAATTCTTCA	720
	TGATTtTCTT ATTGGATTTT GAATTTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG	780
5	AACAGTCATC GCATTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT	840
	ATGCATATCT TTTAAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT	900
10	CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTTT AAACCTTCTA GTTTTATCtT	960
	TAATAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT	1020
	AGTTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTTG	1080
15	GAATCCATTG GTTGAAAAAA TGGGAA	1106

(2) INFORMATION FOR SEQ ID NO: 658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

	TTTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA	60
30	TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTTCGCA GTTTAATCAA	120
	AACCACATAA AGCTTTTAAAC TTTACTCTTT GATTTAAAGA GTGATAAATG TTTACAGTTT	180
	AATTAAAACT GCATAAGAAC TTCTAGCTTT TCTCTTTCGT TCAAAGAGAA GCAGCTGTTC	240
35	GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTTAA AGAGTGACAA	300
	ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA	360
	GAAGTTCTAA TACCACCATA TCGTGCGATC GGGAACGGTA	400

(2) INFORMATION FOR SEQ ID NO: 659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1899 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

50	ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTTAGTTT AGTCATCATT	60
	TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA	120

	AACTTTAACT GAGCTTCATG GGGCACCAGG TTTTGAAGAA GAAGTAAAAA ATTATATGAC	240
	TCAGCAAATG GCGCCGTACG TAGATGAATT TATTGAAAAT CGTATGGGTG GATTTTTTGG	300
5	TGTGAAAAAA TCTAAAAATC CAAATGCAAA ACGTGTAAATG ATTGCAGCAC ATATGGaTGA	360
	AATCGGATTT ATGATTACAA ATATCACTAA AAATGGAATG ATTCAATTCA CAAATTTAGG	420
	TGGTGTGCA AATGATATTT GGCAAGGACA ACGCTTAGTA ATTAAAAATA GAAATGGCGA	480
10	TAAAATTATC GGTGTGTGTT CTAATATACC TAAACATTTT CGTACTGGTA GTGAAGGTGC	540
	ACCGGAAATT AAAGATTTAA CATTAGATAT AGGTGCTCAA AATGAAGATG AGGTGCGTGA	600
15	GCGCGGAATA GATATAGGAG ATACAATTGT ACCTCACACG CCATTCACAC AGTTATCTGA	660
	ACATCGATAT AGTGCTAAAG CATGGGATAA TCGTTATGGT TGTGTCTTGG CAATTGAAAT	720
	ACTAGAATTA TAAAAGATA TAGAATTAGA TGTAGACTTG TATGTTGGCG CAAATGTTCA	780
20	AGAAGAGGTT GGATTACGAG GTGCGAAAGC ATCTGCAGAG ATGATAGACC CAGACGTTGC	840
	ATTTGTAGTT GATTGTTTAC CTGCCAATGA CGTTAAAGGA AACCAACCAT TATCTGGTGA	900
	ACTTGGTAAA GGGACGTTAA TTCGCATAAA AGACGGTACA ATGATTTTAA AGCCTGTATT	960
25	TAGAGACTAT TTATTAAAGT TAGTAGAAGC ACATGACATT GAACATCAAT ACTATATGTC	1020
	ACCAGGTGGA ACAGATGGTG GAGAAATTCA TAAAGCTAAT ATTGGTATTC CGACTGCAGT	1080
	TATTGGTGTA TGTGCACGAT ATATTCATAG TACAGACTCA GTATTTGATA TAAGAGACTA	1140
30	TTTTGCAGCT AGATCTTTAC TTTCAGAAGC CATTTGTAAT TTAGATAATA ATCAAATAGA	1200
	AACATTACAA TATAAATAAT CGGGTAATAA CAACTATTAT CTCTAAATAG TTATATATAA	1260
35	TCATTAATTA AGGAGACATA AAAATGAAAC AACTTGAATC AGAACAACAA TTTGAATCTT	1320
	TAAAACAAGG TGCTACAGTA TTTGAATTCA CTGCAGGCTG GTGTCCAGAT TGTAGAGTGA	1380
	TAGAACCAGA TTTACCGGAA TTAGAAGCGA GATATCCTAT GTTTGACTTC GTATCAGTAG	1440
40	ACCGTGATAA ATTTATGGAT ATTTGTATTG AAAATGGTAT TATGGGTATT CCAAGTTTTTC	1500
	TAGTATATAA AAATGGAGAA CTGCTTGGA GTTATATTGG AAAAGAACGA AAATCAATTG	1560
	AACAGATAGA TGCATTTTAA GCTCAATACG TGTAATTTAG ACTAGAGAAA AACGGGGTAA	1620
45	TACTCGTTTT TCTCTGTTAC TATGTGTTGA TTTATTGTAA ACTATTATAA GGTGCGAAAT	1680
	TAGGAGTGTT ACATATGAAT ACCTTTCAAA TGAGAGATAA ATTAAAGGAA CGTTTAAGCC	1740
	ATTTAGACGT TGATTTTAAA TTTAATCGTG AAGAAGAAAC TTTGCGTATT TATCGAACAG	1800
50	ATAATAACAA AGGTATCACG ATTAAACTTA ACGCTATAGT CGCAAAATAT GAAGATAAAA	1860
	AAGAAAAAAT TGTAGATGAA ATTGTTTATT ACGTTGATG	1899

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3774 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10	GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA	60
	TGTTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA	120
15	TTGTTTGAAG TGAGTATCA CTGGATTGGT ATTAAACAAT GTAAAGGAGA GATTGCAAAT	180
	GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA	240
	GTTTATTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAACT TATTAATTTT	300
20	TAAAATTAAC GGTGTGTCATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG	360
	TGTAAACAAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTTAGATT TATTTACTGA	420
	TCAAGAAAAA GTGACGCTTG AATTGCGAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA	480
25	GTTTGAAATT ATTGACCGGC TAAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT	540
	CTTTGTTGTA AACCAAATTA ACGGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA	600
	ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT	660
30	ATACAGGTCA AATCTTGAT AGTGGCATT TAATTTATCC CTTTGAATAC TGTTATTTAA	720
	CGAATATCGG TCCACCTGGT CCAACAGGGA TACCTAATAG GAACCAAATG ATGACAAATA	780
35	CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA	840
	GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA	900
	TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG	960
40	GATGAAAGCC GATAAGGATT AACATTGGTA CGAATATCGG TCCTAAAATA CCCCATTTAG	1020
	CCGATGCGCT TCCGATTAAAC ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA	1080
	ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA	1140
45	AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AAACACAATA ACGATAAATG	1200
	TTCCCATGTA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTAAATTT	1260
	CTTTGCTTAA AATCCCATAA ACTAATCCAG GTACTAAAAA TACGACAAGA ATAATTAATC	1320
50	CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTAGCA TTTCTTAAAA	1380
	AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAAATAAT TGTGACTATG AAAGTATAT	1440

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	CATCATGCAT	TAAACTGTCA	TCATATTTTC	CTAATCTAGG	AATAATGAGC	TTAGTTGTAA	1560
	CTAGCAATAT	CGTAGGAAGT	AATACAACGA	CACTCGCTGC	GATAAAGTAC	CAGTTCATAG	1620
5	CAACGTTTGT	TTTAATAGAA	TCTGAAACGA	TACGTGTTGC	CGGTTCTGTA	AATGAATAGA	1680
	CCAAAGCATC	TTGCATACCA	ACAACTATAT	TTGCTGCAAA	TCCTCCAACA	GCGGAAGCAT	1740
	ATGCCATCGT	TAGTCCAGCG	ATAGGGTGAT	AGCCAATTTT	AATAAAAAGC	ATTGCTGCAA	1800
10	GCGGCGGCAA	GATAATTGTC	GCAGCATCGC	CGGCTGTACT	ACCTAAAATA	CCAATTAATA	1860
	TAATAGTCGG	TAAAATTAAG	AAACGTGGTG	CGCGATTTCAC	AACAGAAATC	ATTAAC TTAT	1920
15	CGAAGTATCC	TGTTTTCTCT	GCAACACCAA	TACCAATCAT	CACTGCTAGT	ACTAAGCCTA	1980
	ATGCTGGGAA	CTCTGAGAAA	TTTTTAATCG	TATCATTCAT	TATCATCGTA	AATCCATCAT	2040
	GGCTAATTAT	ATTTTTAATA	TAAATGGTTT	GATGCGTACC	TGGATGCTTA	ACAGATACAT	2100
20	TAAATAATGA	GATAACCCAT	GTCATAATGG	CTAAGCCAC	ACACATTAAA	AAGAATAAGA	2160
	CGCTAGGATC	TGGCAATTTA	TTTCCGATTT	TTTCAACACT	ATTCAAGAAA	CGATTGACGA	2220
	TAGACCCCTT	TTGTTGATGT	TTTGATGTCA	TCAATTATTC	CCCCCTTGT	TAAATATTTA	2280
25	AAGTGTAACA	AAAAATACTC	TCAAAAGTAA	CAATTTTCAG	GAAATAAAAA	AACTAATATT	2340
	GTTAAATATT	TTGAGTTATT	CAATAGAAAG	TGTATAGCAG	AGTAGTTAAG	ACTGCCTGAA	2400
	GACTTATCTA	TTAGGTTTAT	GAAGCATCGA	ACAGTGGAAG	ATAAGGACTG	TAAGTTTAAG	2460
30	ATATGTTGTA	TAGGAGTGAC	TGAATGAAAC	GTTTGGAAGG	TAAAGTAGCA	GTCGTAACAG	2520
	GAGCAAGTAC	AGGTATCGGT	CAAGCTTCTG	CAATCGCTTT	AGCTCAATAA	GGTGCCTATG	2580
35	TATTGGCGGT	AGACATAGCT	GAAGCGGTAT	CGGAGACTGT	CGATAAAATT	AAAAGTAATG	2640
	GTGACAATGC	GAAGGCGTAT	AATGTGGATA	ATGCAAGCGA	ACAACAAGTG	GTAGACTTTG	2700
	TGTCTGACAT	AAAGGAACAG	TTTGGAAGAA	TCGATGTGTT	GTTTAATAAT	GCCGGTGTGG	2760
40	ATAATGCGGC	TGATAGAATT	CATGAGTATC	CAATAGATGT	GTATGACAAG	ATTATGAATG	2820
	TAGATATGCG	TGGGACATTT	TTAATGACGA	AAATGATGTT	ACCTTTAATG	ATGAATCAAG	2880
	GTGGCTCTAT	TGTTAATACG	TCTTCATTTT	CCGGACAAGC	AGCAGACTTG	TATCGCTCTG	2940
45	GATATAATGC	TGCGAAAGGT	GCAGTGATTA	ATTTTACAAA	ATCAATCGCA	ATTGAGTATG	3000
	GCCGTGATAG	CATTCGAGCC	AATGCGATTG	CACCAGGTAC	AATTGAAACC	CCGTTAGTAG	3060
	ATAAACTGAC	AGGTACGAGT	GAGGATGATG	CAGGTAAAAC	ATTTAGAGAA	AATCAAAAAT	3120
50	GGATGACTCC	GCTGGGACGT	TTAGGTAAAC	CAGAAGAAGT	TGCTAAATTA	GTAGTCTTCT	3180
	TAGCATCTGA	CGACAGTTCA	TTCATAACTG	GAGAGACGAT	TCGAATTGAT	GGTGGTGTGA	3240

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AATTATTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360  
 TATTGTGCGA ATGAAAGACA TTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420  
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTAACGTA TTGTAGGTCG TGCATCTAAT 3480  
 TTATCAGAAT CTCGAGTTCA AACTTTTGGG GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540  
 10 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTTAG ATTGCTATAT 3600  
 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATCCGTT 3660  
 AGTTTATtAT tATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTG 3720  
 15 ATTTCAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

## (2) INFORMATION FOR SEQ ID NO: 661:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1078 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGG GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCAnAA 60  
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATCnG CCTTCAGAGG AATCATGATA 120  
 30 CGAGGAATAA GAAATTTAAA TGTGAGCGAA GTCAATATAG TATTTGCGAT TATTTTTATT 180  
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240  
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300  
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTATT ATAAGAATTA TTATATAATT 360  
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAAATCTAA TTCTTTTAAA GTTAAACAG 420  
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480  
 TTACATTGAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540  
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600  
 45 CAACGCTTTT ATTTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAACTTGAA 660  
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTTGCC 720  
 ATAACGTACT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTTAGTT AACTCATTAA 780  
 50 CGTTAGTTTC GTTTTGATTT ATATAAtAAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840  
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTGTGTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020  
 TTAGATTTTT CGAGTATGAC TCAATTTCTG CATTACGAGG ATTTTAAACA TAACGGTT 1078

(2) INFORMATION FOR SEQ ID NO: 662:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1398 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

AACTTGCTTT TTAGTATCTA CGTTAATATT AATAGCTTTA ATTTCACTTG TATTAATTAA 60  
 ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA 120  
 AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA 180  
 TTTTAAAACT GATTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT 240  
 AAATGTTAAG CTTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTGaTTG CATATGGAAC 300  
 ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC 360  
 GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA 420  
 AGTTGTTGTA ATCAATGACT TAAATTTTCAT AAATTATCTC TCCTTTTTTG TGAATTTCGT 480  
 ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAACTGA ATATTAATAA 540  
 TAAATTATCT TTAACAATAA TTTTAAACA CTGTTAAAAG TTCTTTTAAT TTTGATTAAAC 600  
 TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAACCTA 660  
 AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTGATTAT ATTTACAGCA 720  
 TCTTTATACT CAAAAACAT TTAATTAAA ATATAAATTC GATTTAATAA TTAATTTAAA 780  
 TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT 840  
 GGTGAAAAAA ACAAAATCCA ATTCACTAAA AAAAGTTGCA ACACTTGCAAT TAGCAAATTT 900  
 ATTATTAGTT GGTGCACCTA CTGaCAATAG TGCCAAAGCC GAATCTAAGA AAGATGATAC 960  
 TGATTTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAAACTG 1020  
 GGGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT 1080  
 CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA 1140  
 AAAAGAATAT CCTTATCAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC 1200  
 TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA 1260

CAACAAAGGC TTTGTTTATA CAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380  
TACACATACA CAATCTGA 1398

(2) INFORMATION FOR SEQ ID NO: 663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60  
ACCAACTTGT AGTCGTTTAT TATCTAAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120  
TTGAATGATT GAATATAAGT CTTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTTG 180  
GTATGTTTGA GAACGTGTAG AAATGATTTC ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240  
TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAAATA TTACGCTCCG TATACGGAAT 300  
GTCCATGTTC tTGkTAACCA TGCTTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360  
aAATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420  
TTTAGTTATA GATCAAGAAA AAACATTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480  
ATAACTATCT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540  
CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600  
TCTTACATT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660  
GGCATTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720  
AATTATATTG GCGCACTAAA ACAATTTGTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780  
TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840  
ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900  
TTCATACAAT CTGAAGTCcC TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960  
TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020  
GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCCTTAC 1080  
AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140  
CTTGTAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

(2) INFORMATION FOR SEQ ID NO: 664:

(A) LENGTH: 787 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

10 TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT 60  
 AAAATGTAAG CTTTGAGTAA TATTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA 120  
 CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT 180  
 15 TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAsG WACAAATTGT 240  
 GATATTTTTA CATAGTTGTT TAATCATTAG TAATCCGCCC TTTCAATATT ATCCTTCTTT 300  
 ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTTCCAATC 360  
 20 AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtCTCTAAAA TTGGAGGTGC 420  
 ATAATGTATy CCAGGTCTGT TTTTCAAAT ATCTTGATTT CGTGTGTATG TTACTTCAAA 480  
 25 TTGCGTTTTT TCATTTGACT TTTCAATAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC 540  
 ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTTTCTAC 600  
 AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC 660  
 30 ACCATACTTC AAGTCATTCG CAATAACTGA CCAGTGATCA TGgCCAGTTh ATTTATTTTT 720  
 ACCGCTGGCA ATTGTGTCAT AATTGCTGTC ATCATCAACT AATCGTTTTG GAAGTAGCTA 780  
 TTTGCTG 787

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## (2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

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TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGCnTn AATCAATATA TATATTTAAA 60  
 AGCAAAGGCG CGCCATGTGC CTTTtTThTA tTTTGATAT CTGTATCAAA ATCGATTTGA 120  
 TTAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG 180  
 GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTCGTAT TCAAAGTTTT 240  
 CATTTAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT 300

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420  
 CGAACGCTAA CATATCTTTA TCATTATTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480  
 5 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTTAGTCATG TTT 533

## (2) INFORMATION FOR SEQ ID NO: 666:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60  
 20 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120  
 GCTTCGAATC GGTACGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180  
 25 TAATGGATTC AAAGCATATA TTGCGGTCAT CTTGTAAATG CACCAAACAT CCCAGCATTT 240  
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300  
 CGACTCTGAA AACCTGGACA TGTGTATGAA CCTTTnAGAC AAGGGAAGAA ATTTGCAATC 360  
 30 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

## (2) INFORMATION FOR SEQ ID NO: 667:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60  
 45 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAAA ACAACTGATT 120  
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAGAG 180  
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240  
 50 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300  
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCAyTGAtA GCyTTATATA 360  
 ATAAtAGTCa gGtTACCAAC AAmAtWTATA TCCcCGAAGG AAGCGGGTAT TT 412  
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## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: doubl  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

TTACTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA 60  
 CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTTGGTG TGAAATTAAA AGAGATTATA 120  
 GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTTCAGAGGG 180  
 AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC 240  
 TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG 300  
 TATACGTTCT GTCnTATTnC CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG 360  
 TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA 400

## (2) INFORMATION FOR SEQ ID NO: 669:

## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1236 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

TGTTTCGATAT TTTTAAATTT ATCTTTTAAA TACAACAACCT GTTTCGGTAA TGATTTAACT 60  
 GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTTAT TTAACCTATC GATAATCGCA 120  
 TGTAAATCCT TCAAATGTC TTTTGTTTCA AAAGTAAATA CATTATGGAA GCGATGAATA 180  
 TCATCATCAT AAACATCAGA ATCAITGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA 240  
 TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA 300  
 TCTAATTTTT CCAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTTCA 360  
 TTTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT 420  
 GTCACITGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA 480  
 AACAATTGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA 540  
 CCAATTTGaa TGTTCTGTGC ATTTCTGCTTA ATAAAATTAT aATAATGAAC ATCGTGACGT 600  
 GCCGGTACAT ATGTTTCAAT TTTCTGGTca AAATACATCT TTTGACCACC TTTTAAATTT 660

ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAATTT GACTAATAAG CCCCAATGAA 780  
 ATGTAATCaC TTtTACTTTT AATCAATAGT GCATTAATTT TAAAATTCAA CGCTTCATTC 840  
 5 ATTGCTGGAA TATCTTTTTT TAACAATTGA CTTTGCAGTA ATTTAGTATT GGTAGAAATC 900  
 ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT 960  
 10 TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTCAC TATGCATGAG CTGATCTAAT 1020  
 ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT 1080  
 TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTGTGTG TCGGCTTTTT AAAATCAACT 1140  
 15 TGCTTACGAT AGATAATCTG TTCGAACTTT TCGTACGATT TATCCAATGG CTTTGCATCA 1200  
 TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA 1236

## (2) INFORMATION FOR SEQ ID NO: 670:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1819 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30 ACAsAATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA 60  
 CATTTAAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG 120  
 AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG 180  
 35 CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG 240  
 TTCATTTATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCAyT 300  
 TTAmATTAAA TAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA 360  
 40 ATCAACCKGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT 420  
 TTGAACACGG TGGCATTTGT TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAACATAAA 480  
 45 GATGTATTTG AACTATTTGA TGTTGAAATG CcTATCGTGA TGCCAAGGCT TAGAATTACT 540  
 TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG 600  
 TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA 660  
 50 TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA 720  
 GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTGA ATAAAAATAA TGAAATTCAT 780  
 ATACAACAGT ATGATTATTT GTTAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC 840

5 GAAAGAATAT GGAATCCACT TCAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC 960  
 TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC 1020  
 AAGGGTTTAG CCCGATTAT CTTAATGATA AATCGGGCAT TTTTGTGTTT TTTAAAATAA 1080  
 ATTTACAAA TTTTGTATAA ATAGTGGTGG ATAGTGGGA GATGTGTAA ATTATATATA 1140  
 10 AGGTGAGGTG ATAAAAATG TTCATGGGAG aATACGATCA TCAATTAGAT ACAAAGGAC 1200  
 GTATGATTAT ACCGTCCAAG TTTCGTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG 1260  
 GCCTTGATAA ATGTTTATTC GGTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA 1320  
 15 TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAGTT TATGCGTATG TTCTTCTCTG 1380  
 GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGTATTAA CATCCCTCAA AACTTGAGGA 1440  
 AATACGCTAA TTTAACTAAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATTT 1500  
 20 GGGATAGAGA AACTTGGAAT GATTTCATG AAGAATCTGA AGAAAGTTTC GAAGATATTG 1560  
 CTGAAGATTT AATAGATTTT GATTTTAAA ATGGAGGAAT TGAAGTGTTT CATCATATCA 1620  
 GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAA AGAAAATGGT GTGTACATTG 1680  
 25 ACTGTACGCT AGGTGGAGCG GGACanGCCC TTTATTTACT AAATCAATTA AATGACGACG 1740  
 GAAGATTAAT AGCAATCGAT CAAGACCAA CTGCAATTGA TAATGCTAAA nGGGTATTAA 1800  
 30 AGGATCATTT GCATAAanG 1819

## (2) INFORMATION FOR SEQ ID NO: 671:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 609 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

35 ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAACTT ATGCATCGAT 60  
 45 AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT 120  
 GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT 180  
 AGATTTAACA TTTATCGCCG CTGTATTAAAC AATTGTCGGT TATTCAATTA ATGATACAAT 240  
 50 CGTAACGTTT GACCGTGTAC GTGAAAACCTT ACAAAGGTT AAAGTGATTA CGACAACAGA 300  
 ACAAATTGAT GATATCGTTA ATAGATCAAT tAGACAGACA ATGACACGTT CAATTAATAC 360  
 55 AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT 420



TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540  
 ATTAGTTGTA TATAAaGAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600  
 5 AAGCGGTAT 609

(2) INFORMATION FOR SEQ ID NO: 672:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAACAG CAATTTGAAC GTTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60  
 20 TAATCACGAT CCTTTATCAT CAAAGATTTT ATCAAATGG CCAGATAATG TtntTGTATT 120  
 TTCAATAAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180  
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240  
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTGCATGGT ACGTATAGTA AATCTTCAGT 300  
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360  
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAACATATC 420  
 30 AGGTAATATT CAAGGTAGAC ATTTTAATGA GCAaGGTGAA aaAGGTTGCT TATTAATCGm 480  
 GGGTGACCAC TTAaATTAA AGACTAAATT TTATCTACA CAGTATATTA GATTGGAAGA 540  
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACTT 600  
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTTATCGT TTAACGCTTG TTATTAATAG 660  
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720  
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780  
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAA CTGTTTTTGA 840  
 TAAAGCGATG TCAGATTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900  
 45 AACATTCGAC CACACAGCAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960  
 AGGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020  
 50 GTAAAATTGa ATTTAATAAA AACyTCaCTG AAA1TTTTTG TGAAAATGAA GCGGGTAAAT 1080  
 CGACGATTCA AGCATtCATC CATTGATAT TATTTGGATT TCCAATAAA AAGTCTAAAG 1140  
 AGCCAAGACT AGAACCACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200

TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT ACAAAGAAA CTTAATTATA 1320  
 TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTC 1380  
 5 ATAGAAATCT AAATGAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT 1440  
 CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AAaAGATGAA TTATATAAAA 1500  
 aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTAAAACAA CTAGAAAGTC 1560  
 10 AAATTCTGTA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA 1620  
 AATCATCAG TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG 1680  
 15 AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATTCAACA AGAATGGAAG TCTCTAGAAC 1740  
 AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG 1800  
 CACGAGCGCA TAAGCAATCG TTAGWAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC 1860  
 20 AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA 1920  
 TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAACTT ACTGCAATCG 1980  
 AAAAGGATAT TGCGAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT 2040  
 25 CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA 2100  
 TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA 2160  
 30 ATAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTC TGTGAAGAA AAATAGTTCC 2220  
 TG 2222

## (2) INFORMATION FOR SEQ ID NO: 673:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

45 TTGCAGGTAT CATTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA 60  
 AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT 120  
 GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG 180  
 50 TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAGCGGG CGGTTATGCT TATTTAGCTT 240  
 TAGCGGTACT TTCAACGTTG TTAATTGTTG CGAAAAAAGC TACAAATAAA AATAAGAAA 300  
 TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA 360

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## (2) INFORMATION FOR SEQ ID NO: 674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT 60  
 TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT 120  
 CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTCAA 180  
 TAACCTACAC GCTGTCACAT GTGCGCTATT TGCGTTATAT CCTGyTTTtA TGGCACTTTG 240  
 TGTTACATTC AGTGTCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC 300  
 ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT 360  
 TGTCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG 420  
 TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATTTT TATGTGATTC 480  
 TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT 540  
 ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT 600  
 TTAGCACACT TGCATATACC GGCTGTCGTG CTGGCKAGAT ACTAGCATTG AAGTGGTCTG 660  
 ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAC ATATTACAAT CCAAATAATA 720  
 ACAAGAAGAA ATATCAGATA CTTCCCCCTA AACTGAAAG TTCTATCGGT AAGATTTCCG 780  
 TTGACCCAAA TGTAATAAAG GtGtGCGtG ATTATAAGAT AAACGTTCAA AATAATTGGA 840  
 AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC 900  
 ATTATGTCAC GTACCAGCAT ACTCAAA 927

## (2) INFORMATION FOR SEQ ID NO: 675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

GATGTTAAaA TAAGTACATC ATTTTGACTC CCAAATATTG GCTTTAGACC TTGAAATGCT 60

CTCATAATGG CATCAGGTAC cAGGGGTTGG GaCCAGGTGT TAATAACAAC GGTTGATGAT 180  
 AATACATTTA TATGCCTCCT ATAAATAAGA TTTCACTATT TTAGCAAATT TTCTGAAAAT 240  
 5 TTAAGAGCCT AAAAAGtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT 300  
 TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTTGAA 360  
 ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTGGTA ATCGCTTTTC TAATTGTGCT 420  
 10 ATTTGATCAC TTGGAATTG AATTTGAGGA TGGTGACAA TTTTGTGACAT ACTGAATTTT 480  
 CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTTGTkCAA TTGAAATATC TGTGAACTTT 540  
 15 GCACGTTCAA GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC 600  
 ATTTTCATCGG GATTTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC 660  
 TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAGTT 720  
 20 TGGACTTTAA AGTCATGTTG ATGCAATTGC TTTAACCTCC AATATAATTG TGATAGTTTA 780  
 ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA 840  
 CTGAAAGATG AATTACAAAT TGTTTCGCAC CGTGGATTGC CGAGTGATT TCTGAAAAT 900  
 25 ACAATGGTCG GTTATCGAGA GGTAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT 960  
 CATTTGACCA AAGACCAACA TTTTGTGTG ATACATGaTG AAACAATTGa TAGAACATCG 1020  
 GaTGGtArGG GCGTAWTGC TgATTACACA TTATCGCAAT TAAAATCATT TGATTTTGGT 1080  
 30 AGTTATAAAG ATGTTGCTTT 1100

(2) INFORMATION FOR SEQ ID NO: 676:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

ATTAATTTCA TATGGAAATA GTTGAAGTAA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG 60  
 45 AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC 120  
 TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTTGG AAGATTCAGG 180  
 TTCACCAATT ATACCTAATG CTTCTCCTTG ATAAATATGT AAACCTAATAT TGTTTAAATC 240  
 50 GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTT TTATTCTGTT TATTCCTATA 300  
 GTAGTGTGTT ACTTTTAGTA ACTTTAAAC AATTGAACTT CCCATCTATT TTCATCCTTC 360

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CCCCACGCaA AAATACCTTT TAATCTTnCT ACTTTAAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

15	GTCAAGTTTT CGGCTAGATT TTAAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA	60
	CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTTGAATTAA	120
	ACATTGGGCG GCCATTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT	180
20	TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA	240
	ATTAATGACT ACATATTATG CAACGGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT	300
	AGTATAACTA TCGCATTTTT CAAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG	360
25	ACGCTATTTT TTTGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC	420
	TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAGAAA ATGGTTATGC	480
30	GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCACCTCA GCAATTTTAG AAGCGTCACA	540
	AGAAGAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG	600
	TTTCTACACA ATTGTTAAAA TGGTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC	660
35	TGTAGCAATC CATTTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC	720
	TGGTTTCACA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC	780
	AACTAAAAAA GTTGTTGAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG	840
40	TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTTATG CTGATCCTAA	900
	AGAATGTCAA GAACTAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAc ATTAGGTTCA	960
	GTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT	1020
45	TTATCTACAG GTTTACCATT AGTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC	1080
	CAAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA ACACTGAAAA CCAAATCGCT	1140
50	TCaGCAAAAG CAGTTCGTGA CGTTTTAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA	1200
	TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAAT TAAAGAGTTC	1260
	GGTACTTCTA ACCGCGCTAA ATAATTAATA TTAGTCTTT AAGTTATTAA TAACGTAGGG	1320

AATAAATAAA ACAGTTTGAT TTAAAAATGA AAGCGTAAAA ATGGTAAAAT ATATCAAAAT 1440  
 TGATTGTGAT A 1451

(2) INFORMATION FOR SEQ ID NO: 678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 668 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTTAAACA AACACCTAAT GCAACTGACG AAGAAAAGCA GGCTGCTGTT 60  
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAACAAAT 120  
 GATCAGGTAG ACACAACTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180  
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTTAAAGA AAAGCAACAG 240  
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATT 300  
 GCTAAAGAAA AAGAAAAGC ACTTCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360  
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420  
 AAACCAGCTG CACGTGAAAA AATCAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480  
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540  
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600  
 ACAGtCAgCG CTgATAGctT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660  
 AGATGCGT 668

(2) INFORMATION FOR SEQ ID NO: 679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1906 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAAGGAAA AATAGCCTTT AACGAATTTA CGAAACAAAT TGAATGTTTA 60  
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120  
 AGTTTAAGAA GTTATATCGA AAAGATTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

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	ATCGTGGGAT GGACATAAAC GCCTTGAAAA GTTATTTATC AAATACTTAG GTGTTGAAGA	300
	CcTGaAGTGA ATAGAACAAC TACCAAAAA GCATTGACTG CTGGAATCGC TAGAGTAATG	360
5	GAGCCTGGAT GTAAATTTGA CTATATGCTT ACACTTTATG GTCCTCAAGG TG TAGGTAAA	420
	TCTGCTTTGC TAAAAAAATT AGGTGGTGCA TGGTTTTCTG ACAGTTTAGT TTCTGTTACA	480
	GGTAAAGAAG CTTATGAGGC CTTACAAGGC GTTTGGCTAA TGGAAATGGC AGAACTTGCA	540
10	GCTACAAGAA AAGCTGAAGT TGAAGCTATT AAGCATTTCa TATCTAAACA AGTTGACCGA	600
	TTTCGTGTTG CTTATGGGCA TTATATTGAA GATTTTCCAA GGCAATGTAT TTCATTGGT	660
15	ACAACTAATA AAGTTGATTT CTTAAGAGAT GAAACTGGTG GAAGACGTTT TTGGCCAATG	720
	ACTGTAAATC CAGAGAGAGT TGAAGTGAAC TGGTCTAAAC TAACCAAAGA TGAGATTGAC	780
	CAAATTTGGG CAGAAGCTAA ACACTATTAT GAACAAGGAG AAGATTTATT CCTTAACCTT	840
20	GAAGTAGAAG AAGAAATGCG TTCAATACAA AGCAAACATA CTGAGGAATC TCCATATACA	900
	GGCATTATTG ATGAATATCT TAACACACCm ATTCctAGCa ATTGGGATGA CTTAACTATC	960
	TTTGAACGAA GACGATTTTA TCaAGGTGAT GTTGATATGT TACCACAGG AAATGTaGAT	1020
25	TACGTTAAAA GAAATAAAGT CTGTGCGCTT GAAGTGTGTTG TTGAATGTTT TGGTAAAGAT	1080
	AAGGGAGATA GTAGAGGATC TATGGAAATT AGAAAGATTT CAAACATCTT AAGACAATTA	1140
	GACAATTGGT CTGTATATGA TGGTAATAAA AGTGGGAAAA TTCGATTTGG AAAAGATTAT	1200
30	GGTGTACAGA TAGCTTATGT AAGAGATGAA AGTTTAGAGG ATTTAATATA AGAAATATTG	1260
	AATAAATATG CATTTTAGAG TGTGTATCA GATGTTGCAT CATTTTTTGA GTGATGCAAC	1320
	ACGGGAGTGT AAAAAGTAAT CGTAGGTGTT GTATCATTTT TGGTGATGCA ACATTGATGC	1380
35	AACAAATGAT ACAACACCTC TTTCCTTTCT AGCTGTAGGG TTCAACCCTG TTTGTTTCCA	1440
	ATGTTGCATC AAATTCAC TAAGTTTAA AAAGTAGTGT TAGGGAGTAA AGGGGTATAG	1500
40	GGGTAACCCT CTAACAGCTA TTTTAAAAAG TTTGGCAAGA ATTGATACAA CATCGGAACA	1560
	CAAATATAAA TTTTGTATAC AAGGTGAATA AATGAAAGAA TCGACATTAG AAAAATATTT	1620
	AGTGAAAGAG ATAACAAAGC TAAACGGTTT ATGTTTAAAA TGGGTCGCAC CTGGAACAAG	1680
45	AGGTGTGCCA GATAGAATTA TTATTATGCC AGAAGGAAAA ACATATTTTG TAGAAATGAA	1740
	GCAAGAAAAA GGAAAGTTGC ATCCTTTACA AaAATATGTG CATAGACAAT TTGAAAATAG	1800
	AGaTCATAAA GTATATGTGT TATGGAATAA AGAACAAGTA AATACTTTTA TCAGAWTGGT	1860
50	AGTGAACATT TGGCGATTGA CTTTCAAACC ACATAGCTnT CCAAAG	1906

(2) INFORMATION FOR SEQ ID NO: 680:

(A) LENGTH: 948 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

10 AATTATTTGA ATAAATTAGC AATTAAAGAG TTGATTTGTC AGTTTAAGyA TTTGAGTGCA 60  
 TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAATATA AGCCGAGAGA AATTGCTCAA 120  
 TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTra AAATAAAATA 180  
 15 AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT 240  
 TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT 300  
 GAATAAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA 360  
 20 AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT 420  
 CCAAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTC GAAATAATAC 480  
 TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT 540  
 25 TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA 600  
 ATATACTGTA ATTGTAGTTT CTACTGTTAT ATTCTTCTTA GTCTTTTCT ATGCCTTAGA 660  
 30 TTTAGGAATT ACAGCATTGA AAAATTTATT ATTTGGTTAG AGGAGTGAAG ACATGTCTGA 720  
 AGAAGTTGGC GCAAAGCtTG GTATGCAGTG CATACATATT CTGGATATGA AAATAAAGTT 780  
 AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA 840  
 35 GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAAnAAGnT GGCCAAGCCT AAAACCGCCT 900  
 GTTAAAAAAA ACCATTCCCC TGGGnTAnGG TTTTAAGTGG GAATTTAA 948

## (2) INFORMATION FOR SEQ ID NO: 681:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 863 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

50 ACAnATAATA ACAAAGCGCT TGCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk 60  
 TCTATACTAT ATATTATTTT TCTAAAATTT TAACACCCTC TTGAGTGCCT ACAATAACTT 120  
 GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT 180

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TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300  
 ATTCAATTTT ACGTAATATG TGATACCAGT TAAATTTATC CACCTCTACT GGTAACCTAA 360  
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTCATCGAC AACCACAACA AAACGCGATG 420  
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480  
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540  
 10 TTTACATAT TTAAATACCT AATTCCTTTG CTAAAAATGC AATTTTATTA GAAGTGCATA 600  
 CACCTGTAAT ATTGTAACCA CGTCTTTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660  
 CCATTGTACT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTTAAAACAT 720  
 15 CATTTAATGT CATTAACCTG AGTGCTTTGA CATCTTTCAT GAAGGTAGCC TCCCATATTT 780  
 AtGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTATnGCT 840  
 20 AACCATTTGT GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 480 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCATTTTGG TTGTTGAGCA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60  
 35 TAATTCGTGA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCTTTTT CTTCATTAT 120  
 TATTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAAGTTG 180  
 GATATTACTT TGTAAGTCA ACCTTGGATG TTGACTTAAC TTATCTTGCC CATCTTTTAA 240  
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300  
 AGGTGAATA AACTTAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360  
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATAACCTTCTC CAGCAATAcC 420  
 45 GaTTCGCATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 689 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60  
 5 AACTGGAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAAATCACC ATTTTAGCTG 120  
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTAG 180  
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240  
 10 GTGACAAAGA AATTGAGCAA GTAAAAGAA AAGAAGGCCA ACGAATACTA GCCAAAATCa 300  
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360  
 15 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420  
 CGGATCAAAC GGCTGCACA AGGACgTCTT ACAACGCaTA ActACGCACT ATCATTcAGC 480  
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTTAA TTGAACAAGT GTACAGAGCA 540  
 20 TTTAAGATTA TGCGAGGAGA GCGGTATCAT AAGTAAACT AAAAAATTCT GTATGAGGAG 600  
 ATAATAATTT GGaGGGTGTT AAATGGkGGa CaTTAAATCC mCGTTCATTC mATATATAAG 660  
 ATATATCACG GTAATTGCGC ATATAACTT 689

## (2) INFORMATION FOR SEQ ID NO: 684:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 858 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60  
 AGATTTTTTG GAATAACCTG AAAATTCAAG TtATAGCGTT GCTTATATTT TAAAAGGTGG 120  
 40 TGATAATGAG ACTTTTtGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180  
 ATTAAATAAA TGtACTCTTT TAATGCGTTG ATAActGTAT TTGTAAATTA GAGAAGGGGT 240  
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300  
 45 TAGCATCGAG ACGCCcAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360  
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420  
 50 CTAGCTTTTT TCAATCCTTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480  
 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540  
 TAATGTGCAA GTTGGTcGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTA 600

GCCACCTTGT TTATTTAAAT CGATAACACG GTTTGCGATT GTATTGATAA ATTCAAAGTC 720  
 ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTAA CAGCAGTAAT 780  
 5 ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT 840  
 TTACTAGCAn CACGACTT 858

## (2) INFORMATION FOR SEQ ID NO: 685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

20 TTAGTATTTTT CAGGnTGGAA ATTGATGTTT GAAATTCACT GAAATGGGCC AGAACCTgAA 60  
 ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC 120  
 TTACTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGAATGACA TTTGATTTAG 180  
 25 GATTGCGATT CGGTAAATCT TAACTTGGGA AAGTCCCAGT AATGTAATCA CCTTGTTTAT 240  
 GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTTGTTTTTT ACCATTGACA TATAATGTAT 300  
 CATTTTGTGA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAACA TAGTCATCAT 360  
 30 TTTTGTGTTGC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA 420  
 CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA 480  
 35 TTGTATATGG CGTAACAATA AATTTACCTA CTATAAATAA AATGACAAAA GCGACTGCAA 540  
 TTGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA 600  
 ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAACt AACATTACCA ATAATAtCCT 660  
 40 TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtK ATTATCTTGA TCATTTAGCA 720  
 CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAAACATA 780  
 AATCTTTAAT TTTTCTGTTT TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA 840  
 45 ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTGCA CTAGTATATA 900  
 TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAACCT 960  
 50 TAATTTTATT TACAATAACA CGATCCCCTT TGTTAAGGGT TGGTGACATA TCATTATTCG 1020  
 GAATGACATG ACCAACTATT ACAAAGTTT GTACGAACAG TACAATGATA ATAGCAAGTA 1080  
 TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCCATA 1140

ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTTCTT TACCTAAATA ACCTAAAATA 1260  
ATTGTTGAAA CTAACCTTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA 1320  
5 GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA 1380  
AACAAATGGGA TTAATCCTTG GCGATCAATA AACTAATCA AGCGTTGAAC AGCAGTACGT 1440  
TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA 1500  
10 AATGTTCCAG AAATTAATCC AAGCCAACTA ATCAATATAC CTAAAATAGG TCCATAAGCT 1560  
TGAATGTTAA TTAAATATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT 1620  
15 AACAAATATA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT 1680  
TGATGAAACG ACAAATCATC AATCCCTTTC TTTGGTTGAA GATAATTATT CTTACATTAT 1740  
AAAGTTA 1747

(2) INFORMATION FOR SEQ ID NO: 686:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 645 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:

CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAGAA ATTAGGTATG TTACTTCTTG 60  
TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG 120  
35 GCAAGGTAAC AATTWAAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGA 180  
AACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA 240  
ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT 300  
40 TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT 360  
TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTATC AACACGAGCA TGGTGAAGAG 420  
CATGAACATG AGGGACATGA TCATGAGAAA GAAGAACATC ATCATCATCA TGGTGGATAT 480  
45 GATCCACACG TATGGTTAGA TCCTAAAATT AACCAACTT TCGCTAAAGA AATTAAAGAT 540  
GAATTAGTGA AAAAAGATCC AaACATAAA GATGACTATG AGAaAAACTA CnaAAATTAA 600  
50 ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA 645

(2) INFORMATION FOR SEQ ID NO: 687:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 956 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

	TTTGTTACTG CTTCTAAAT AATATCCTTT AATTGTTTAA CATGTTGGAT TGTCATATGA	60
10	GGTGATGGTA CATTAAAAGG ATTTAATTCA TCTATTTGTG CATATTGATT TATGACATCT	120
	TGATGCATTG AAATAGGGTT GATATCATTG GTTACTACTT TATTAGATTG GTCTTGTGAC	180
	ATACTAATGG TGCCACCACT ATGAATAACA AGTAGATGTT TCATATATTT CCTCCTATAT	240
15	TTAATTTACC TAATTATGAT AAAATATTAT TCATAAAACG ACAAGGAAGG GAAATGACGC	300
	ATGAAAGCCA TTAATATTGC ATTAGATGGT CCAGCTGCTG CCGGAAAAAG TACAATTGCG	360
	AAACGTGTAG CCAGCGAACT ATCAATGATT TATGTCGATA CAGGAGCAAT GTATCGTGCA	420
20	TTAACATACA AATATTtAAA ATTAAACAAA ACTGAGGACT TTGCAAACT AGTTGACCAA	480
	ACAACATTAG ATTTAACTTA TAAAGCAGAT AAAGGTCAAT GTGTCATTTT AGATAACGAA	540
	GATGTAACAG ACTTTTtAAG AAATAATGAT GTGACGCAAC ATGTTTCATA CGTTGCATCT	600
25	AAAGAGCCAG TACGTTTATT CGCCGTTAAA AAACAAAAAG AGTTAGCTGC AGAAAAAGGT	660
	ATCGTAATGG ATGGTCGCGA TATCGGAACT GTAGTGCTAC CAGATGCAGA TTTAAAAGTA	720
30	TATATGATTG CATCAGTTGA AGAGCGAGCA GAAAGAAGAT ATAAAGATAA TCAATTAAGA	780
	GGTATCGAAT CAAATTTTGA AGATTTAAAA CGTGATATTG AAGCTCGTGA TCAATATGAC	840
	ATGAACCGTG AAATATCACC ATTAAGAAAA GCAGATGATG CAGTGACATT AGATACGACm	900
35	GGCmAGTCGA TTGAAGAAGT TACTGACGAn ATTTTAGCGA TGGTGAGTnC AATTnA	956

(2) INFORMATION FOR SEQ ID NO: 688:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 1166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

	AAAAGGGAGG AAAGAGAACA GTTAAATATG AATACAAAT AATTTTGTTT TCGGACAGCA	60
50	GGGGTATTAG ACGCGATTGA CAATGTCTGT TTAATTAAAC GTAATGTTTA TTAAAGCGAT	120
	GAATATTAGG TGAAAAGTTT TTGAATTGA ATGTAATTGA GGTtTATTGA TTAGACATTT	180
	TATTGAATTG CGTGTtATTA TATAAATGTA AAAATAAGAC GACATGCGCG AACATGTCGT	240

55

TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTTAATATAT 360  
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420  
 5 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTTGATGAA GCGTTTAGTT AGAGTATTTT 480  
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAG CTATCTGAAG 540  
 AATAAATAGA TACTTTTTTG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TkCTCGGTTA 600  
 10 GAGAATTCCA TGTATTTTGA GCATCTAGCT TTTTGTTAAA GTCAyCGTAG ACATTTTCCT 660  
 TAGTTAAATC AATTTGTTTT AATCCTTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720  
 15 CATCATTTTC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780  
 TGATTGTTTC GTACTCGTTA CTTAAATAA TATCAGAATC ATGTAAGAAT CTTTAACTTT 840  
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900  
 20 TGTATCTAAT CCTAAGTATG AAGAATGTAA GCCTGTTCTT AATGTTGTTA ATACTAAAGC 960  
 ACTTGCTACT aATGTTTTAC CTAAAAAttT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020  
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAATAAAT 1080  
 25 ATCAAAAATG TATTAATAT CTATTAATA AAAAATAGAA TAATTTTTTA ACATAGTTTT 1140  
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

## (2) INFORMATION FOR SEQ ID NO: 689:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1083 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60  
 GTTCTTTATA TGTGTCTAT TAAAATTTT AACAAACAAG AACTAKAATT GTCGATTTTG 120  
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180  
 45 GTTCTTTTKG GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240  
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CTTTTTAGAT AGCGGGGATT 300  
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCTCTG 360  
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420  
 GAAGTTCGAC ACTTTTGGaT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600  
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660  
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA AACTGATAT ACATCATATT 720  
 AATTTCAAAC AAGTCATTTA GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780  
 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840  
 10 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAAT 900  
 CATAAATTGG AATATATAAA TGTAATAAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960  
 15 ACCAACCAGT ACCTCGCCAr AGWTATAAATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020  
 TCATATTAAC AGGTnTAATA CAAGTATTTC TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080  
 ACG 1083

(2) INFORMATION FOR SEQ ID NO: 690:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 627 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

30 TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATtTGA 60  
 GTAGCGATTG GTTtGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120  
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180  
 ATAATCAGCC TCTTAATGAC GCTGATaYTA GAAAATTACA GGATATTATT AAAATCATTG 240  
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300  
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360  
 AAAGTGTCGC TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420  
 TTATGGGCAT GGGTTTTAAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480  
 45 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540  
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600  
 50 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 641 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

5	TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAAATA TTCTTCCCAT TTGATTCTTT	60
10	CCAAGATGTT CACCTTCCAT ACTTAAAATT TAGTAACATT TTCTAATAAT ATAAGATTAA	120
	TCACAAAAAA TAAATTTGTC AATTAAAATA ATCCATTATG TCGTGAAATA AGATTTCAGT	180
	TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT	240
15	GCACCTTGTT GGTTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA	300
	ACAGACATCA ATTCTGATAC AGATGCCGTA TTTAAATTTA CTTTAGTATT ATTTGTGTTC	360
	CCaTTTTTTT CGTGCACT GTTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA	420
20	TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTCAG ACAAATTAAT TTGACTTACA	480
	TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTACTCTATC CTTAGATGTC	540
	ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCCTA	600
25	TTTTTGGAAT TATCTCCATC TTTGACCTGG ACATCTTCTA C	641

(2) INFORMATION FOR SEQ ID NO: 692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

35	TATTAAAGnA CTGATGAAC CAAATCATAA AAAGCnATAT ATGTTATTTG CAGCTGGCAT	60
40	TGTGTTnGCA ACTATTTTAC TTATTTCGGC ACATTTTATAC AGCAGAAAGA GAGGTAACCA	120
	AGTTTGAGAA TCATAAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC	180
45	TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA	240
	ACTGTTGCAT TGACAATGAC ATTGGACAAA TTGGATTTAC CAATTGTCGG CAAACCCACG	300
	TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG	360
50	CCGAATGTTG AAGCTGTTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT	420
	AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT	480
55	GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGaTCAATT TAATCGTAAA	540



GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

## (2) INFORMATION FOR SEQ ID NO: 693:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

15	AATTTAACTA TGTMTTCCAC ATTGTTTCAT GTCACGAAAA GGACAACGCG CGACTATAAG	60
	TATCAACTAT TTCCACAAGT TTTATTGGTG TTTTATTAT TCATCGATAC GCTTCATTTT	120
	CATCTCTCCA ACACAAAAA GAAGCTAAGC AACTTATGTT GCCTAACTCC TCTATACTAT	180
20	CCATATTTTA CTATTATCCA TATTTCATTG AATTATCTAA TGTGGCTTC TATTTTTTCA	240
	ATATTTCTAC CGTCAATGAC GTCACATCATG CGATTTGTTT GTAATTTTTT ATTAAGTTCA	300
	AACGTATAAT AGCCGCCATC TTTCAATATC ACTTTTATCT TACTATCTTT AGGAAACTTT	360
25	TTATACAGAT CAAAATTTTG AATTAAATAC TGTCTCAATT TAAAGTCGAG TTCTTTAAGT	420
	GAAATCTCTT CTTTATAAAT GTAGTGTACT CTACCGTACG TAGCAATACC GTCACCTTCA	480
	TCTCTCTTGA TTTGAAATCT TGGTGCGTTT ATATAATCAT AATAAGCGTC TTGATTTTTT	540
30	TTAGTGACAC CACCATATGA AAACACTGTG CCATTACGGT TTTCCGCTTC TTTAACAACA	600
	AATATGTCTA ATCCCGGATT TTTACGTGCT TTAAATCTTT CAATATCTTT ACCAAATATC	660
35	TGTAATCTTG TGAATTTTCT ATTTTATCA AAGATAAGGT AATGCTTGCC ACCTTTGCTA	720
	TAACGATAAC CAGTAACATT TTTAAGTTCC TTACTTGCGC CACTATAGTA ATCTCTTAAG	780
	TCAAAGATAT CTTTGTGAC ATTTTCATAT TTTGCTTTAT GTTCACTCGC ATTTACAGTT	840
40	TGATGCAATG ACGTTATTGT TCCTGTGCT AAAATACCTA ATGCTAAACT TGCTTTGCGA	900
	ATTGCTGTCA TTTTCATAGT TGTATGCTCC ATTCGTAATT ATTAGATTG TTCGCTTACG	960
	TCTATTGAAT CATAAGCTT TATTATAGTT AGCGTATTTG ACCTTTCACA TTAACCATG	1020
45	TTTAATAATC ATTGAATCAT TATTAAGTAA ATTAAGGATC TATAATGTTT GTTAAATAAA	1080
	CTGAnCCCGT TGTGCTTAC ACCCGnTnGA T	1111

## (2) INFORMATION FOR SEQ ID NO: 694:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

5 TTATGGATGG ATTAAGAGGT CGTGTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT 60  
 TAACAATTAT GGAAAATTTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA 120  
 AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT 180  
 10 AACTTGGTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA 240  
 ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT 300  
 ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT 360  
 15 TACGGCAATT ATTTTAATTA TGCTCAACT TTTATKCTCA CTTATAACTT CTAATTTAAG 420  
 TTATAG 426

## 20 (2) INFORMATION FOR SEQ ID NO: 695:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 737 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

30 AAAAGGGGnG TAAGGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA 60  
 AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG 120  
 35 CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA 180  
 AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA 240  
 ATTGGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA 300  
 40 TCGTTTAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA 360  
 AATTTCTATT GATAAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA 420  
 ACTTGAATTA AACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTTATA TTGAAAaGCC 480  
 45 GAATTACGGA GAAGAAGATT AATATTACAC TATAATAAG TCATTACTTT ACGTACGCGT 540  
 TGATGTATGT AAGTAATGAC TATTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC 600  
 TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG 660  
 50 GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG 720  
 TATTACGTAT TGCATTA 737

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

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AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC      60
GATGATGGCA GGATTTATTA TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC      120
ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTGAGCTT      180
TGCgTTAGTA CTCATTTTAT TTACAAACTC CGAACTACTA ACCAGTAACT TCATGTACTT      240
TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTTATT      300
ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTTyATTT AGTTTCATGC GTTTTTCAAA      360
TGTAATGACG CCAGATAwgt TAAAyCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC      420
TACTGGTTTT GT                                                              432

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## (2) INFORMATION FOR SEQ ID NO: 697:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 782 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

```

CTTTTATACG AAAGTTAAaA TCAAATATAA CATTAATGTT TGATGGGGAT TTTGCGGGTA      60
GTGAaGCAAC ACTTAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA      120
TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT      180
TTACTGCTTT TGTAaaaaAT GACAAAAAGT CATTTCACA TTATAAAGTG AGTATATTAA      240
AAGATGAAAT TGCACATAAT GACCTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG      300
ATATTTGCTT TATGAAATCA TCGATTTTGC AACAAAAGGC TTTAAATGAT GTTGCACCAT      360
TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA      420
ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC      480
AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTAAAAAC ATTTAATGAG      540
AGATAAAGAT ACATTTTTTAA ATTATTATGA AAGTGTGAT AAGGATAACT TCACAAATCA      600

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TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720  
 AGAACAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780  
 5 TA 782

## (2) INFORMATION FOR SEQ ID NO: 698:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 714 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTGCGT 60  
 20 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120  
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180  
 TACAATGATT TCGTGAATGTT AGTTACCCAT TTTATGTGTT GCATAAAATA TGTTGTTATA 240  
 25 AAACATTTTA AATCATTTTA TATAAACAAT CTATATATTT TTGGCATTTC CAAAATATCA 300  
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360  
 TTTGTAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420  
 30 TTGTGATTTT ACTGAAACAT GGTAAATTGC GTTGTGATG AATAACTTTA GCATAAATAT 480  
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540  
 AACTTGTTAA AAATATATGA TGGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600  
 35 TGTTACTAGA AATTAATGTG TGAATCAGTG CTACTGTTAT TGGTATtGCG AACAAGAAAG 660  
 TCATTTGATT TCGTGTtATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

## (2) INFORMATION FOR SEQ ID NO: 699:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60  
 TTGGGATTTG nnTTTAATTA AAGAACCTTT AAGAATGTTA CAAGTGCgTA TCCCTGTACG 120

EP 0 786 519 A2

TGGACCAACA AAAGGGGGCG TCGTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240  
ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300  
5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAGGAGCAT TCCATGAAGT TGGAACGTTT 360  
A 361

(2) INFORMATION FOR SEQ ID NO: 700:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 943 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

20 GTCTTAAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTTCCTT 60  
AAAGGACCTA CAAGCTGTTC TAAATATAAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120  
TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180  
25 TATCTCCCTT TAGTAGAAAT TTTATTGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240  
CCATTTTAGC ATTTTGTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300  
AACCATTAGC ATCGAGAATG CGCCCCAAAA ATATAGATGA AATCATTTCC CAACAACATT 360  
30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420  
TTTTTTATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480  
CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAAGAT ATGCAACTTG 540  
35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600  
TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTTAGA AAATGGCAAA ATCGTCTTGA 660  
TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTCGT TCAAGAGCGC 720  
40 AAATTTYCGA GTTATATCCT TTAAATGACG AaGATGTGCG CCAAGCGTTA ACTCGTGCAA 780  
TAGAAGATGA TGAGAATGGT TTGAAAmCAT ATCaACCCAA AATTGATGAA GATGCCATGA 840  
45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900  
CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

(2) INFORMATION FOR SEQ ID NO: 701:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 445 base pairs  
(B) TYPE: nucleic acid  
55 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TTGTTCTGTT GATTTAGATA 60  
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120  
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180  
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240  
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTTAACGTTA 300  
 TAGCAGCGAT AAATGAAGGT TATGTTGGTA CTTTGCCAAT GAATGAAGCA CTAAAAAaT 360  
 15 CGCyTTGTTG TtattCACGT kGATTATaTT GATGGGGaCA TTTAAAAAAT GTGAnTAAGG 420  
 AGCAAGGTTT ATTACAAGAT GTTAA 445

## (2) INFORMATION FOR SEQ ID NO: 702:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 752 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAAATTGT CATTGTTTTG GTTGTAaaaa AGGTGGCAAT GTTTTTCAAT 60  
 TTACTIONAAGA AATTAAAGAC ATATCATTG TTGAAGCGGT TAAAGAAATTA GGTGATAGas 120  
 TTAATGTTGC TGTAATATT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTCKG 180  
 35 AyGATTTACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240  
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300  
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT 360  
 40 TTCTTTCAAAA AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420  
 ACGAAGAAAA TTTCAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480  
 ATGCGCAAGG AAGAATTGTT GGATATTGAG GTCGAACATA TACCGGTCAA GAACCAAAT 540  
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTATATAC AACTTAGATA 600  
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660  
 TTATAAAATC TGATACTGCT GGCTTGAAAA ACGTTGTTGC AACAAATGGGT ACACAGTTGT 720  
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

- (1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

nCGTTTTTGT nAAACnGCTT ATATGTATAA CTTTTCCCAA TTTATCATAA GTTTTGATAG 60  
 AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTTCAATG ATAGGAATAT 120  
 TATGTCTTTC GCTATAAGTA ATTATATTTT TCTTTTGCTC ATTCGTTAAA GAACGACCTG 180  
 TCGGGTTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT 240  
 CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA 300  
 ATTGCTCAAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT 360  
 CTTGACCTAA AAACCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA 420  
 TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC 480  
 TTAACCTGAT ATAACCATAG CCATTATTAT AACCAAAAGA TAAGTCTTCA ATATGACTGG 540  
 CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCCAATTCAC 600  
 CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT 660  
 ACTGACTTCT TTGTTGAGAG GACCATAACA TCATTTCAAG CCACTTATTT GTAATATGTG 720  
 CTTCAATTCAA ATAGTCATTA ACATATGKTC CACTACCTAC TTTAGTATAG ATAAATCCTT 780  
 CAGCTTCTAA TAACTCAATA CTTTAAATAA TCGTTACTCT ATTTACGTTG 830

(2) INFORMATION FOR SEQ ID NO: 704:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

AGTGGTGTTG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAAGTTA ATAAAAAAG 60  
 AGGGGTCAAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA 120  
 GTGCACTAGC AAGATACTTA ACTGAGCATT TTTAAACACA TGATATTGAA GCGGAAATAT 180  
 TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG 240

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TATTAGGAAC GCCAAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360  
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420  
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480  
 CTGTACCAAC TCAAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540  
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTCGAT CAAATTGTAT 600  
 10 CTTTGTGAA TAATAGTCCA TATGAACATT TAAAATAATA TTAAnAAATA TGTAATnT 659

(2) INFORMATION FOR SEQ ID NO: 705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

nCACCATATA GTAACGGCA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60  
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTT TGCATTTTCT ACAATTTGAC 120  
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180  
 ATCCGTTCTG TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240  
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300  
 GCTATCACTT GTTTGCATCA CATCATTGAC AACAAATACCA CGATTACATC TAGACCTGAT 360  
 CTTGGCACTC CTGGGAAGGC GGAACCACTG CATACAACTA 400

(2) INFORMATION FOR SEQ ID NO: 706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

TTAAAAATAC AGCTACAGGT AATTTTAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60  
 GGTGTGGCGC TGTAATACCT TTAACCACTC AGAAAGAATG CACCTGGTCG TACTTTCAAA 120  
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180  
 TCATTTGTTG CTCTTTAAT AACTTGGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240



GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAAGT TCTnACTGTA 360  
 CCTTTACAAA ATGCCTTGnn 380

(2) INFORMATION FOR SEQ ID NO: 707:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAaAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60  
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120  
 TAAAGAAACA CGACATATAG AATTTTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180  
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240  
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300  
 TGTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360  
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

(2) INFORMATION FOR SEQ ID NO: 708:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 447 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60  
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAACA 120  
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180  
 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240  
 CGAAGCGATG AAAGCTTTCC CTATGTTGCGA TAATATCGAA TATACTGAAG ACATCGAAGT 300  
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGC 360  
 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAAATGGC 420  
 TAAAAGCATT GAAGCACATC CAAATGC 447

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1448 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

10	GTGTCTACCT GTTTTTGTG TTCAATTGTT AACTTTTCTT TTTGAATAGT AGTATTTCGAT	60
	AATTCCTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA	120
15	GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG	180
	TAACCTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT	240
	TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCTGTGTT GTTCTAACTT	300
20	TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGTATATG CATCAACCAA	360
	ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG	420
	TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTGCG TATATATCAT TAATCTGCCT	480
25	AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG	540
	TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTTTCGTT	600
	TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT	660
30	ACCAATAGAC ATATCAATTA AAAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT	720
	TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC	780
35	TGTCATCTTC CTTTATTTAG CATTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG	840
	TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC	900
	ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC	960
40	ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA	1020
	TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAAG TGTATATGTC TCAATTTTAC	1080
	CACCTCATAA TGTTATTATA CGTAGTTTTA CTTAAAAAAA CTAATAATTA CTATAGTTAC	1140
45	TACTTTGTTT GTTTCAGTGC GTCAAACTTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG	1200
	TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA	1260
	GCCGATTATG AGGGATGGTG GTTATTCAGT GACTGGCCAG AAAACATTGT TGAAAAATAT	1320
50	CAATATCAAG ATTTTGATGA CATGTTTAAG CACTATCAAC AATTGATTAA TCAATGTAAA	1380
	GTTCAGTTCT ATAACATATG CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT	1440

## (2) INFORMATION FOR SEQ ID NO: 710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG 60  
 GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAAGCTT 120  
 TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA 180  
 AAGATGCAGA GCGGCACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA 240  
 GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTTAATGCTG 300  
 AAGCATTTGA ACAAATGAAA AATGATGCAA TTTTATTATTA TATCGGTAGA GGACAAATTG 360  
 TAGATGAAAC AGCATTAAATC GATGCACTAG ACAATAAAGA AATTTTAGCA TGTGGTTTAG 420  
 ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGaCGT GaTAATGtTC 480  
 TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAACh 519

## (2) INFORMATION FOR SEQ ID NO: 711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC 60  
 TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC 120  
 CTCAAGATCG TTATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAAC 180  
 GGGGAACAAC TGATGAATTC GCAAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT 240  
 TAAAAGCTAA GTTAAAATTA TATGAACAAA TGATTTGCGA TGCACGTACA TTATCAGAAC 300  
 AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA 360  
 AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT 420  
 ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTTAACTCT AGCGGAAATG AAAAAGACAA 480

TGTITCCATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600  
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTAAATGTC AATGTATTTA 660  
 5 CAGGTAATGT AATCGTAACT GATTTCGGAG ATGAAACAGG TACAATTTCTG AATATACAAA 720  
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTTATCCTC TGATCTTGCT AAATCATTA 780  
 ATTGTCAATG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAAA AATATGTACT 840  
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900  
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACTTTATC GATAAGTAGT CTCCGCATAT 960  
 TTTAATGCTA TTATAAATA AAAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020  
 15 AAGGGCATT AATAGGACTA ATAGTCTATA ATAAAAGGGG TAAATTTTAA CTAAAAGCAT 1080  
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140  
 20 CATCCTTAAC AATCTGTCTT TATATTTTAA GTCTCTAATA TGTTGCACTT GAGCTAAATA 1200  
 TTCAATTGTT gTTTACTTtC AaTGCGaCGt GCTTtCtTtC GTtCAaCaCG TgwGGTGCTG 1260  
 TATCATAAAA CCATTTTTCa ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320  
 25 GCCTTCATCA TCTAACGCAa CAAATGTAA 1349

## (2) INFORMATION FOR SEQ ID NO: 712:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCA TGTITGATGA ATTTGATAAA 60  
 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGGAG AAGTATTATA TCAAGCAATT 120  
 40 GGTTTGAAAA TGCAACCAGA ACAACAAAAG TTAAGTCCA AAAnCAGGTn GGCCTGAATG 180  
 GAACCAGGAG GAAnTTGAAA ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240  
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300  
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTCa 360  
 TGCGTAAAGA TTAAAA 377

## (2) INFORMATION FOR SEQ ID NO: 713:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

	AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGTTTT CACTTATTTC AACACTTGTC	60
10	ATTGTCATTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT	120
	GTTTTATGTC TCAGGATCCA GTTATTCATT ATATCTACAA TATTTACGAT TATATAAATA	180
	ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT	240
15	AATGGGATAT GGCATGTATA CGTTCTTGCC TTTTATCTCA TTTCCAATGA TTAATCTGGA	300
	TATTGTTCTA AAAATGCTTT CGCTTCTTTA TTAAGTGT TAAAATCAAT ACCTTGTTGC	360
	ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT	420
20	TCTATGGaAC GCTCATAACC TTTACTTTTC yTAAAATCAC TTGGcAAATA GTTCACaTCG	480
	TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC	528

(2) INFORMATION FOR SEQ ID NO: 714:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 731 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

35	TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT	60
	ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT	120
	TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA	180
40	CAGGATAAGT TAGTTAAACA TTACCAGAAA CTAATTGAGT CATTGGCATA TAAATATTCT	240
	AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC	300
	ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTTTAGT ACCTACTGTA	360
45	ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAAACTTGGA GTGTACATGT TCCGAGACGT	420
	ATTAAAGAAA TTGGGCCAAG AATCAAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG	480
50	cGTTcAcYTT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA	540
	GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATT CATTGAAGCT	600
	GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACcTTAT	660

55

CGAGAAATCA T

731

## (2) INFORMATION FOR SEQ ID NO: 715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

15	TTTtAGrGGa AAGCGaATTa GtCaTATwCg CaGCAGATwG aATGATTGaa AAmGaAATTG	60
	aATTCGATTCC AATTGTAAga AAAAAAGATA ATCAAAAGTA TGAAGTAATT GGAAGAATTT	120
	CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG	180
20	GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT	240
	AGGGCAGGTA TTTCAcAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA	300
	TATATTGAAT CTTTtGAAGA TGTtGATGAA GTGATTCAAG TTGCAAAAGA TACAAATGCT	360
25	ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA	420
	GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG	480
	GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTc	540
30	AAGAAAATTG ATGCGATAGA GTTTGcAGTT AAATATGATG ATGGTAAAGA TCCTAAAGGA	600
	TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTcGAGAA CTTCAAAGAC ACCATTATCT	660
	CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC	720
35	ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG	780
	AAGAnAAATT AAATCGcATT AGAnAAGAGC GACTAAACA ATTAnGACTA	830

## (2) INFORMATION FOR SEQ ID NO: 716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

50	nGAAGAACAA GTTTAnCATC TAAATGCCCG TTTAAAACTA CAACTACTTG ACGATGTtAA	60
	ATCAGTGTtT AAnTCTCAAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC	120

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	AGAACGTATA AAAAAATACT TTAATAAGCA ACTCACTGAG CAAATTGCAC CAATCGTTCA	240
	ACAATTAGCA GATTTACATG TCATTATTAA TCCTCAGTTT AACTTTGAAT CAGCTAATAT	300
5	AGAGCAACCA TTATTGCACA TCGATTTCOA CGATATGCTA AATGCATTGC CTAAACAATT	360
	AACAAAACGT AAAATTTTGA ATCCAAATGG GCAAAGAGAT ATACATGAAT CAATTTGTCA	420
	AAGTACGTTA GGATTATTAC AACCACAAAT GGGATTATTG AGGCAACAGC TTGAATTATA	480
10	TGTAAAGCAA ATGGCTGTAG AAGCTGAATC GCAATTTGAA AGTTTTGAAG CTAATATTCA	540
	AACGCAAATA AACGATTTAT TAGCATTTGA TTTAGATACA ACACTTATCA ATCAATTGAA	600
	AGATAAACAT CAACAACTGA AAACATTTTT ATATTAAAGaa AGAAGGAACG TTTTAAATGC	660
15	CTAATAAAAT ATTACTTGTA GATGGTATGG CGCTATTATT TAGACATTTT C	720
	GTCTTCATAA ACAATTTATG TACAATTCAC AAGGTGAACC TACAAATGGA ATACAAGGAT	780
	TTGTGCGTCA TATCTTTTTCG GCAATACATG AAATACGCCC TACACATGTA GCTGTATGTT	840
20	GGGATATGGG ACAATCAACT TTTAGAAATG ATATGTTTGA tGGTTATAAG CAAAakCGTT	900
	CTGCACCACC AGAAGAATTG ATACCACAAT TTGATTATGT TAAAGAAATT TCAGAGCAAT	960
25	TTGGCTTTGT AAATATTGGC GTTAAAAACT ATGAAGCGGA TGATGTTATA GGTACATTAG	1020
	CACAACAATA TTCAACTGAT AACGATGTCT ATATTATTAC GGGCGACAAA GATTTACTGC	1080
	AATGTATTAA TGACAATGTT GAAGTTGGCT AATTAAAAAA GGTTTAACAT TTATAATAGA	1140
30	TATnCATTAC ATCGTTTTn	1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

	GATTTAATCA ATGCAGTTGC AGAGCAAGCT GATTTAACTA AAAAAGAAGC TGGTTCAGCA	60
45	GTAGATGCTG TATTCGAATC AATCCAAAAC TCACTTGCTA AAGGTGAAAA AGTACAATTA	120
	ATTGGTTTTCG GTAACCTTGA GGTACGTGAA CGTGCTGCAC GTAAAGGTCG TAACCCTCAA	180
	ACTGGTAAAG AAATTGATAT CCCAGCAAGT AAAGTTCCAG CATTCAAAGC TGGTAAAGCA	240
50	TTAAAAGATG CTGTAAAATA ATTTTACTTA AAAAGCCCTG AATAAGGGCT TTTTATTTTG	300
	CTTTTAATAC TTACAACCTG TACATAAATT GTAATGTTCT TCTAAGTTTT TAATCTTTGG	360

AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480  
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540  
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

## (2) INFORMATION FOR SEQ ID NO: 718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTGMaATG GaGCACGCCC TTATTTGATA GAAGTAAAAG ACATTTAATT 60  
 20 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGtGC ACTGTATGAT 120  
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGACTGGAAA CAGGACATAT AAACATGGGC 180  
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGcATT CCATCAACAA 240  
 25 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300  
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360  
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420  
 30 AAATATGAAA CTGTTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480  
 GACTTTTACT TGA 493

## (2) INFORMATION FOR SEQ ID NO: 719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

GCATTGCCAA AACAATACGT TTATATTATT GAGGAACTAC TGTATAAAAG TAATGAATAT 60  
 45 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAAC TAAACAGGCA 120  
 GATGATTTAA TTATTGGACT CGCTTATTCC GTACAACGCT TAGTCGTGCA TCATTTACAC 180  
 50 GTTGTGGTG ATATTTATGA TCGTGGACCA CAACCAGATA AAATTATGGA TACACTGATT 240  
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300



GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420  
TACTATGACG CAGATAATCC TGCTTTTAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480  
5 TTAAGTCAAC GTGAAGAAAG TCAAATTACT AAAATTCATC AAGCTATTGC GATGATTCAA 540  
TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAAT TCGAAATGGA AGAACGTCTT 600  
TGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660  
10 TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720  
GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780  
CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840  
15 ATTCATGGTT GTATTCCAGT TGATGAAAAT GGTGAGATGG AATCATTGGA AATTGATGGT 900  
CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATTT 960  
20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020  
AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080  
GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaAT 1140  
25 ATGGkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200  
GGTCACACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60  
TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120  
AGTATCTACA TTGTCCGCTG GGAATAAACG TAAAATTAAT ATATTAGTAG GTTTACTAGG 180  
45 TCAACCTCGA ATTCTCATTT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240  
TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300  
TCATTTAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360  
50 TTTnTTCAA CAGTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

(A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10	CTTATTTTATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA	60
	TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC	120
	GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTG	180
15	CTTTTTTCAA ATAAGAAAGT ATTAAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA	240
	CTTGATTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTAAAATAT	300
	CCAGAAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA	360
20	AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAAGAGGG	420
	AACATAGAAA AAGATAGGTT TTCAATTTC AATCATTTTCA AAGATACCTA TCACACCCTA	480
25	GTTAGAATAG ATATTAACGG TGGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA	540
	AGTCATATTC ACATATATAA TGATAAGTAT	570

## (2) INFORMATION FOR SEQ ID NO: 722:

30	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

40	ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA	60
	GCACCTTCAT TATTGTGTAT AATTGAATA TTATTGCTT TTAAAGTATG TCCAATTAAG	120
	TTTGAAGTCG TTGTTTTACC ATTTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT	180
45	GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT	240
	CCTCTTTTAC CTA CTGCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC	300
	CAC TGTCTCA TGTGTTTCCT CctCAAATt CCAC TCGCAT CATTATAACA TGACAAGGCA	360
50	ACTTCAAAAA AGTTTCTCAA TCACAAATng ATACCAAGTGT	400

## (2) INFORMATION FOR SEQ ID NO: 723:

55	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 1113 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

	GATTATATGC TGTGGCAAA ACAATATACC CAGATGAATT TTTATTTTGA GTAATAGTAT	60
10	AACCATGCTT TGTCTTACTA ACTTTGACAG CTTCTAATGA ATTTGAAGCG TCTTTAAGCG	120
	TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTTACTCG ATACTTACCT TTAGGCAATG	180
	ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT	240
15	ATTTATAAGT GAGTTTATTT CTTTCTGTG TATATTCATT CACTTTAACA TCATGAGCTT	300
	TATCCGGCGA AAGTAATTCT AAATCCATTT CAAAATACAA ATCTTTAAAT TGATTAGAAA	360
	CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTTAACTTGT AATAAATGTT	420
20	TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTTAATTGT TGAATCTGAT AGTAAATTTT	480
	TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA	540
	TTGCTTGTTT TTTATCTAAT GGAGATTTTA ATTCCTTATT GGAAAAGACC TTATTTGTAA	600
25	TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAAC TATTGTCTT	660
	TGTGTTTCTA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC	720
30	GATCATTAAAC ATTCCAAAGT GATAGTaAAT TTgACGATgC CAAGTAATCT ATAAGTGCTG	780
	TTTTTATCGA TTGGCATATT AATTTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA	840
	TTAAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT	900
35	GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT	960
	TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCAACGT TGATAATGAT	1020
	TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC	1080
40	ATaACGATTA ATACTAATAT TGCAACGGTT AAT	1113

(2) INFORMATION FOR SEQ ID NO: 724:

45

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 464 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

55

55	TGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTTT AGTGTGTACT	60
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	GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA	180
	TTCATTTATG TTACGCCCTT TAAAATTAG TGTTTAAAT GTCGAGTGCC TGTGACTACC	240
5	ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC	300
	GGTTGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG	360
10	AAAAATCCAT CAGATACTAA CGCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC	420
	AATTTTAGCA GCACCGACAC GATTCATTGG CCAGCAnCTA TACC	464

## (2) INFORMATION FOR SEQ ID NO: 725:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1440 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

	GTTAAATnCA nTATTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC	60
25	AAATGACGCA AATTTTAATA GTAGAAGATG AACAAAACCT AGCAAGATTT CTTGAATTGG	120
	AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA	180
	AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG	240
30	GCTTAGAAAT TTGTCGCAAA ATTAGACAAC AACAACTCTAC ACCTATCATT ATAATTACAG	300
	CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG	360
	TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTTA CGTCGTCAGC	420
35	CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTAAAGTGA	480
	CGGTAAATGG CGCAGAAATT GAaTTAACAA AAACAGAGTA TGATTTACTA TATCTTCTAG	540
40	CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA	600
	ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAGTTAA	660
	AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT	720
45	GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACGATGATTA CGTTTGTCAC	780
	GATATTTTTG TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA	840
	GCTTGATGAT GCaGAAACGAA GCTCaAGCGA TATTAATAAt TTATTTCaTT CTAAGCCTGT	900
50	TAAaGATATA TCTGCaTTAG ACTTGAATGC aTCTTTAgGT AAtTTTCaAG AGATAATTAT	960
	TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA	1020

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	ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTC AAAGGGTATA GCTTGTTAAT	1140
	TCATTCACCTA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT	1200
5	TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC	1260
	TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA	1320
	TAAATTGCAA TTAAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA	1380
10	GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC	1440

(2) INFORMATION FOR SEQ ID NO: 726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

	TGATATTCCG ACTTGCGAGG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG	60
25	ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA	120
	AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAACTGTT TTTCAAATTG	180
	TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA	240
30	TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA	300
	CTACCCAGCG GGnTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC	360
35	AGGCGGTGAT GTATG	375

(2) INFORMATION FOR SEQ ID NO: 727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

	TAAAAAATT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA	60
	AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA	120
50	TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAAA AAAAGAGCTT TTATTATTAT	180
	TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT	240

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360  
 AGGTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTGTGATT TTTATGGATT 420  
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

(2) INFORMATION FOR SEQ ID NO: 728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATcTAcA GCAGTAGAAT ayCCTGTTTT 60  
 20 CGTcTTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120  
 AGAATTTATA TTAATCTT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180  
 TTTTTCTTGA ATTTCTTTTT CCATTTCTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240  
 25 TTCTTCCATT TCACTTAAAA TCTTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300  
 CTGATTGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTC GCAAAGTAAA TTGCATCAGT 360  
 AATAGAAGCA ACATATGGAT TTAACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420  
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480  
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATACTG GCCAACATAA TATCGAAAGA 540  
 35 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600  
 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTCGACAT AATTATTTAT 660  
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAAtATT 720  
 40 ATTtCGCAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780  
 AAAATCcAAT ATTATCAAAA GACGTTTCCa ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840  
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTAAACAAT 900  
 45 TCGATTTTTT CTGTTGTTT ATCTtGAKGA GTCATTAAAG TATCTTCaAG TTTTACTTCa 960  
 ATCGGACTAT CTACATTAAt CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020  
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTTCA CTAAATGTTT ATAGACACCT 1080  
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140  
 CCTGGTATAT TATCAGAAGT ATCTCCCAT TATCCTTTCA TATCAATAAT TTGATTAGGT 1200

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	CCTTTTTTAG TGTAATAAAT GGTACATTA TCCGTTGCAA GTTGTGTTAA ATCTCGGTCT	1320
	CCCGTAATAA TAATTGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA	1380
5	ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT	1440
	TGGCGAATAT AAGGAAATTG CTCACCTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA	1500
	TATTCATAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA	1560
10	TGATTTGGCT TTTCTTCTTT TAAAATCTTC TCTAGTAACA TTGCAAACC ATATACTGCA	1620
	TTGGTATGAA TGCCTGCTTT GTTGATAAC AAAGGTAATG CATAAAAGC TCTAAACTT	1680
15	AAGCTATTAC CATCGATTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA	1740
	TATATnTGTG	1750

(2) INFORMATION FOR SEQ ID NO: 729:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

	AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA	60
30	CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTCAT TCGATATTCT AACGGAAGAA	120
	TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA	180
35	CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA	240
	AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT	300
	TTTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA	360
40	TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTCAGGTGG ATTATTGCAC	420
	TCAAATATGC nGnTATACG	439

(2) INFORMATION FOR SEQ ID NO: 730:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 481 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAAACCTGC ACGTTCTGCT 120  
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTCAAC ATCTGGAAC 180  
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240  
 TGACCCACG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300  
 10 CCTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360  
 GATAATTTAG GCTCCGTTTC TAAAGCAATA TCAGATTCTT CAAATCCTGA GGCATAACCA 420  
 TTTGCATGAT ATGCTTCTAG CTTTGTCTTC AATTCATCAA AGGGnTCGGC AGTAGTAAAT 480  
 15 C 481

## (2) INFORMATION FOR SEQ ID NO: 731:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 828 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTCT ATTGATTGAG AAAATAGTTA TTTATATAGT TTTTAAAGAA 60  
 AAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120  
 30 TTAATGAGT AGAGGAGGCT GCAAwTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180  
 CACAATGAAA GTAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCTTT mGCTTCTTTC 240  
 35 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300  
 CCTCTATTCT TTATGGTGAC TAAAAATCTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360  
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420  
 40 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480  
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540  
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TTAAAGTTGA TAATGTAAGA 600  
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAATGAAA TTAACGAACA AGATAAGTTA 660  
 GATGGAGAGC TATTTTCGTAA AAATTTTGTC GGTGTGCATG ATGGGTCAAC GAATAAATAT 720  
 ATACATGTTG GGTTACAACC TGAAACCAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780  
 50 TTTTAAAT ATTTTGATGC GCCTCAGCCG TTCAAAATCA TGGCTAGT 828

## (2) INFORMATION FOR SEQ ID NO: 732:



(A) LENGTH: 1622 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

10	CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAACTAAGAT	60
	TGTAATTATC CCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA	120
	TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTTAAAT	180
15	CaTTAGaATG TATAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA	240
	TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA	300
	TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT	360
20	TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACACTA AAATATTTAA	420
	AACTAACACT ATTTATTCAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA	480
	TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTTGAAGTA TACTATAGAG	540
25	TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGGA TTAACACTTC	600
	ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTTT AAAGACGGAT	660
30	CTGTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT	720
	TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTTAAC AATATTTATT CTCATAGAGT	780
	TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA	840
35	TTTTCTAATA GAAAATAACT TTACTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT	900
	AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG	960
	CTGCGCCATC CTCTTCATTC GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTTCAG	1020
40	GGCGTGCATT TTTCATAGCA ACTGTATAAT GACCAAATTC AAACATTGCT CTATCATTGT	1080
	CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTTCCTT	1140
45	TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT	1200
	TTGArACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA	1260
	TTTTTTCTAA ATTAGAACTG AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG	1320
50	TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA	1380
	CGCCATTAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCATGTTTCA TCTTCTTTTA	1440
	AAGAAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTTGTTGG CGCTTAGCTA	1500

55

CTACTTCTCC AATTGTTCCA TTTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620  
CA 1622

(2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAaAT AAATCCAAAT TCTTTTAACG AACAAAGAGTG CCCAAGTTAT TGCTGATCGT 60  
TATGCCAGAT AnGCATATCA ATGATAATTA TGGTTTAGAA AGAATTTCTA AGACAAATCA 120  
TGGATATAAT TATGTGTATT CCAATGATAA TTCAACTAGT AAGCAACATG TAAGTATTTT 180  
AAATCAAGGC ATAATAACGA AATAATAGAT GGAACAGTGT ATTCTAATTG GATATACTGT 240  
TTTTATTTTG CAATAATTTA ATTTAAAAAG GTGAATTCAA CTTATAAAAT GATGTAAATG 300  
TTATGTCAAA ATCAACCAAT CCGTAATGTA TTTTAAAAATG TTAATATAGT TCTGAAGAAG 360  
TATAAATGAG GTGTTGAAAT GGCTAAAAAT AAGAAAAACgA ACGCGATGCG TATGCTTGAT 420  
CGTGCAAAAA TTAAATACGA AGTTCATAGC TTTGAGGTAC nTTAAGAACA TT 472

(2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA AATTTTTTCT ATTATTTGTT CACGAGTAAA GATTTGCTTA GGACGTGCTG 60  
CAAGCATAAA TAATAATTGA AATTCCTTGT TCGGTAACGT CATCGTTTFA TTAGATACTT 120  
GGAGTTCCAA ATAGGATTGG TTTAGCGTTA AGTTGCCAAT AGTCATTTCT GAATTTGAAT 180  
TGATATTATA TCGACGTAAT ACAGCACGAA TTCTAAAAAT AAGTTCCTTA ACCTCAAAGG 240  
GTTTGTTTAC ATAATCGTCA GTACCGCTTA TAAACGCACG CTCTTTGTCA CTAAGTGCA 300  
CCCGCGCTGT TAACATAATA ACTGGTATAT CATAATCATT TTTTAATGTA TTACATAATT 360  
GAAAGCCGTC CATACCATCC ATCATAATAT CTACCACTGc AATATCGaCA CGCTGTTTTT 420

GTTTTGTnAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

(2) INFORMATION FOR SEQ ID NO: 735:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTTCCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60  
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120  
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180  
 CAGAAATCCC CAAACGGTAA ATTGTGGAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240  
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGGAAA ATTTGTATTT AATAAAGGAT 300  
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAACTT ACAAGGAATA 360  
 GGCATTGCGC TGGGCTGACC ACCAGGGTTT AnGTGnCCnC 400

(2) INFORMATION FOR SEQ ID NO: 736:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 780 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60  
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120  
 TCGTAGATAA AGATCAATCA AGTGAAACGA AATTAATCTT AAACCTCTATT GGTAAAGGGA 180  
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240  
 TAAAAAACA TAACTTCAA GGCTATTTTG TTTTGTATAA AGGTATGACC AAGGCATTTT 300  
 ATAAACAAGG CGAACTACCA ATTTCAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360  
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420  
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480  
 CTGATTTGCT GATTACAGGA TTAAACCGTT CAGGTGCAtT TAACTTAGAA CCGATTCAAT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA 660  
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTCG TACGTTGATT ACATGGTTTT 720  
 5 ATACTATGTT ATGGGnGTAT CGnTGGTGTA GTTTGGAATG TGGTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 946 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTnATnTG GTTTTTAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60  
 20 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCTTATA 120  
 GTCTTGATTG CCTTGTA AAA ATGTTAGTAT TAATTGCTTC ATCGTTTCGA ATTGTTGTGT 180  
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTTCGAAA AGCTTTTCAA AACATCTATT 240  
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300  
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAAtAA ATTGAAATAG 360  
 TTCATTGAAA TTAATAAATC GAACAAATAC TTTGGCACGC TGACTTCGAT CTTTCGGATT 420  
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGTAGCCAGT TGAGCTGTTA AATCAATTGT 480  
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGATTTT GTGGTGGTTC 540  
 AGTAATCTTG GAAACGAGTG AACGGAAGTG TTTAGGACTA AAATGCAAGT AATTCTTAAA 600  
 35 TTGATTTGCA AAATTTGTAT GACTGTTAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660  
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAACAAGT TTAATACTTG TAAAATAATC 720  
 TTTAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780  
 40 GCAATGCATC GCTATATCTT TTAAAGACAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840  
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAAATATT CATGATCTAT 900  
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID NO: 738:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

5	TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAGTTC AAGCATTAGA	60
	AGAAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA	120
	ACAAATGAAT GATTTATTTA TGCACTTAAA GGAATTATTT TCCGAAGAAT CATTTGCTGA	180
10	AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAAT	240
	ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA	300
	TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTCmCyGcAT TTTTaATGCC	360
15	ATTCCGTAAT TAATCCGGAT GGTCCAATTT AATTAAC	397

## (2) INFORMATION FOR SEQ ID NO: 739:

## (i) SEQUENCE CHARACTERISTICS:

20	(A) LENGTH: 915 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

	CAAGGTATTT CATTTGACCC ATTCACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC	60
30	TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT	120
	TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAs ATATCAATCT	180
	TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAGTAC	240
35	ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG	300
	CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT	360
40	ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC	420
	TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA	480
	TAAAGTGGGA TTAAAAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA	540
45	ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTCGATGA	600
	ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAAAGTAA TGAAAGACCT	660
	AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTTG CCAAAGATGT	720
50	AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA	780
	AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTTC TTAGCAAGAG TATTATAACA	840
55	ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT	900

## (2) INFORMATION FOR SEQ ID NO: 740:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

```

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GGCGGTAGAT      60
TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA      120
CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG      180
GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG      240
ATTATCATCA AGATCAAATT CAATTTAGTG CATCATTAGA AGATATTCAT TTAAATATTG      300
AACATGgaAT TAATTAAACG TATCGGTGga TGCTGGTGGT AAGTTGCATA CTGGACGcGT      360
AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACACT GAAGAAACAA GTGCAAGnnn      420
TCATCGCATT GGATG                                          435
  
```

## (2) INFORMATION FOR SEQ ID NO: 741:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1198 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

```

AATATCATAA CCAAAGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT      60
CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA      120
TCACCAAAGT CAGAATTTAT TGAAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA      180
ATACCTGGCG ATTAATAAAC TGTTTCCGTT TTTTAGCACT TAATATATTT AAAAAGACAA      240
ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAACTACC      300
CGTCTTTTcA CAaCCAAaGc TaCAAAAaaG aTgGCTAGTT ATTCTTTTCGT CACCCGCTGA      360
ATCATTAGTG TTGTTATTTT CTTTAACTTG CACGTCTAAA TCAAGAAcTT TTTCCAAaGA      420
TaAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC      480
CACACAATAA ATCAATGAAT TTAATAATAA TTATTTGTTA TTAATTTGTA AATCGTCATT      540
  
```

TGAATATTTT TTGTTTAACT CTAAATTTTC GGGTTTAACT TCCTCTATTT CTAACAGTTA 660  
 TACTCCAGGA TTAGTTTCTT TAGAATCCGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720  
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TnTTTGTAGT TATTTCCAAC 780  
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTTGGT AAGTTACTTT 840  
 10 GATTTTAGAT TtTTTTGTAT CATTTTGT TT ATGAGAAAGT ACGCTTATAA ATTCTGGGTT 900  
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTGGC AAGAAATTTT GACCAGCATT 960  
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020  
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080  
 TGATTTATGA TTTGTTTTTC TATCAATCGT AGTTCGTAA CTTTCTTGT TATAATTTAT 1140  
 CGTTTCTGAA AATGATTTTG ATCCATTTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198

(2) INFORMATION FOR SEQ ID NO: 742:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 818 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:

GTGGCATATn CAACTACTA CTGAAAGATC AATTACATAC GTACAGATT TGC AAAATGA 60  
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAAACGTAA ATCTGTAATT AATTcAGATG 120  
 35 TTAATGTAAC GGTAAAAGAT AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180  
 AAACGACGAA AAGAATTGtT GTTGTCGCAA AAATAATTAA GGTAAGTTAA ACAGAAA mGA 240  
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAG 300  
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360  
 TGTTTGTTAC ACAAACTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420  
 45 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAATCTGA TGTCTTTAAA GCAGCGCATA 480  
 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540  
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600  
 50 TATGACAATT GGTATTGTTA GCTTTTGTA CGACCATAA TGATACCGAT GATGGTCGTT 660  
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAA ACATAGTTTG aTTGAATGT 720  
 GgCTTTGGAA AATAATCATC CAtTATATCa TTtTGGATTn TATTTTGGAA GAAGAAAAGA 780

## (2) INFORMATION FOR SEQ ID NO: 743:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

	TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA	60
15	ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA	120
	AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA	180
	CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT	240
20	ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTTCAGAAT TAAGTGGTGG	300
	ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC GAAAGTGAAG TTTATTTTCT	360
	AGATGAGCCG TTTGTGCGAA TTGATTTTAG TAGCGAAAAA tTAATCATGA CAAAAATcGA	420
25	GAACTTAAaa CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA	480
	GCAATACTTT GATCGCATTa TTCTATTAAA TCAAACATTa CGATACTTTG GTGATAGTGA	540
30	AGAGGCTATG AGTGTCACTC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA	600
	CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTCT AACATTTATT TACATATCAA	660
	TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT	720
35	AGTTTAATTG TATTACGTGG TCTTTCATTa ATGGGAGATG CAATGAGTCA CGCAGTATTA	780
	CCTGGTGTGG CCCTATCATT CTTATTTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT	840
	GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACATCTa GTAGTAAAAC GAAACCTGAC	900
40	GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA	960
	ATAAACACTa CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT	1020
45	AGTGCATTTT TAACAACTAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC	1080
	TATCGTCCAT TAATGATTTc TACATTCGAT CCAACGTTTa GTAGAATGAG TGGTCTAAAT	1140
	ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAGnAACAGT AGCAAGTatT	1200
50	CmAACGGTA	1209

## (2) INFORMATION FOR SEQ ID NO: 744:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs



(C) STRANDEDNESS: doubl  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

	CCGCCTTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCAACATT AAATACGTTT	60
10	TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTTCGTAT AATAAGAAAA AAGGAGGTAA	120
	GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG	180
	ATTCAAATAT GTCTCAAAG AAACCTTGCTG AaCTCATTAA CATAAAACCA TCTACTTTAA	240
15	GCGATTATTT AAATTTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG	300
	TTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT	360
	CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC	420
20	AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAACAGG	480
	AGAAAACCTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG	540
25	ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA	600
	AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA	660
	AAACTCACAA TnTGA	675

30 (2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 924 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

40	CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA	60
	TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCGCT GAAAATACCT TTATCTTGAA	120
45	ATAAGTCAAC TAACTCTTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA	180
	CGTGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA	240
	TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC	300
50	AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC	360
	ACCCTGAATG GTTGACCGA ATATTTTCGAG TACAGGAATT TTAGCCATTA GTTACACCTG	420
55	TTCTTTGGT CTAAATACGA CATAACTTGT TGGTGTCTTCT CTTACAAATA CTTGAATACA	480

TACGATTTC A GTTGAAGGGA TTTTGT TTTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600  
 GTCAAATTTA CCGTGTATCA TCTTTTTC AA ATGGCTAAAG TTTACTAAGA AGCCAGTGTC 660  
 5 ATCTAGTTTA TCACCGACAA TTGTTAAaya CAAAGTAAGT ATGACCATGG ACATTTTGAC 720  
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780  
 10 ATTCAATTG ATATGGATGC GTTGTACTAG GATAGATTG TTGTAACATT TTAAAGCGCT 840  
 CCTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900  
 CCACAGCCAT CCCCAATGAT ACCG 924

(2) INFORMATION FOR SEQ ID NO: 746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTTAG TTTTGCTGTT 60  
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120  
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180  
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTTAACT GGTTTTATAT 240  
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTTAGGAC 300  
 35 TACATATTAC GCTTTTGGTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360  
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACCmCGA 420  
 TTtCCAACTA rGATkGAATT kGGACCmCTA ATkGTTAATG GTcctCCTAG TAAATTGGAA 480  
 40 GCTTGTCCAT TaCTTCCATA TAAAtAACCA ATCCGCCAGC AAAtCCCcAT GGTkGAAGTC 540  
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCA AGCGCTGCAC 600  
 TACCATATGC CCTTGCACTT CTAGAATCAT TAACAAATTC TTAAAGATT TCTCCTAAAA 660  
 45 TTGGTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720  
 TCAATGGTTT CAAGGGTTGG CTACCACGAT ATGCACCTTC CCCTACTTTA GCATGATATA 780  
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840  
 CAATTGAAAT TGCGAAATTT TCTTGTTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900  
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

EP 0 786 519 A2

(2) INFORMATION FOR SEQ ID NO: 747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT	60
CACCCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCTTT AATATCGACA TGAGGTTTAG	120
TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT	180
GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCTTTG ACGTCTCTCT	240
GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC	300
AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA	360
TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAAC GATAAACACT TATAGTTTAC	420
ATAATAATGT TATCGTAATT ATAGCACGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT	480
CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA	540
CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT	600
TTTTCGGTCC ATACTTTGGA TCACCAACTA ATGGGAAGCC AATATATTTT ATGTGAACAC	660
GGATTGATG CGTACGTCCT GTTTCAAGTT GACATTCAAC AAGCGTATAA TCTTTAAAT	720
GTTCTAGTAC GTTAAATGT GTCACGTCTT CCTTACCATC ATCAACAACA GCCATAGATT	780
GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT	840
TCCCGTGGAA CTAAACGAT ATAGT	865

(2) INFORMATION FOR SEQ ID NO: 748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA	60
AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA	120

TTTTAGGTTT TTCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA 240  
 TGATTGAAAC TAAGAAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA 300  
 5 TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTTAAAA ATCTTCAATA 360  
 CAATAAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC 420  
 CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC 480  
 10 CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTGTGTA AAAAGTACTA ATAGGGCCAT 540  
 CTGCGTGAAC TTGTAACCAT AAAGGGAAGA AAACAGTTAT GAACCCCTTG AAAATATCTA 600  
 15 GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG 660  
 TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAA TAATTTTCCA ATTACGAATC 720  
 CACTTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA 780  
 20 TTACACATCC TTTAATATCT TAGGACTATT TTATCATA 818

## (2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

ATATCCAATa ACTGTTcATT GTCTTGATAT TCCTTAAATG TTTcATAATG CTCATTAGAA 60  
 35 ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTCCTCTT TATTAATTAT TACGCCATCT 120  
 TCTAATTCAT ATTCTATAAT TCTGCCGTGT TCATTCACAA TTTGAAACCT TACTGCTTTA 180  
 AAAGTTTTCA TATTCcCACA TCCcATTAGT TTAATATTTA TGATTTTTGA ATTATTTAGA 240  
 40 AGATTTAAGG TCATTTcATG ACTAATTTCT TTAAATATAA CAAATAACGA GATGCTATAG 300  
 CTATTAATTA TATAAAATTT GcCATTTTGa CCATTTTTAA GCTAGTAATT AAGATATAGG 360  
 cATAGGAGGT GAATCACACA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA 420  
 45 AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC 480  
 ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT 540  
 TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA 600  
 50 CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCACTGAAT 660  
 TATATGTTGA AACAATAAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG 720

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TCCAATTATC CTAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840  
 AATTAACCTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900  
 TCGnCTTTTG GTGTAGTTTT CCTAATAGAn AATAGACnTA GGTGCCAAA CCGATTACAT 960  
 AAAAAATTGC C 971

(2) INFORMATION FOR SEQ ID NO: 750:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 832 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

ATAGATTACT CTTTGTATCT GTAGATCCTA CTGTAACGAC ATTGTCCATA GATGCAGGAA 60  
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTGTGTCAT 120  
 TGACATCAAT ACCATCATT A CCAGCTGCAG CAACAACGAT AGATTTTTTC TTCTGGCGT 180  
 AATTGATTGC TTTCTGTAAC GCATCGTATT CTACTTTTTTC ATCTTTTCTA AATGTTTGAT 240  
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300  
 CATTTGCAGC TTGAACAATC GCTTTTGATA CCCAAAGCAG TTCTGTTTTT TTACTIONACAA 360  
 ACACGCGATA CATTGTAAAT TTGTTATTCTG GTGCAACACC TATTAACCTA CCATTAGCAC 420  
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCCTATC ATTGACATCG TGAACATCAC 480  
 CTGTTTCCTC CGGTTCAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540  
 TCGAGAAATT ATTTTTCAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600  
 TTTTGGTGTT AGCATGTTTT GGCAAATCAT CATACGATGC ACCATTATTG GTTATTTTAT 660  
 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGATGT TCTGTCTATT GTTTTCTCGC 720  
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTTAAt ATCATTTTTA TAGTTTGCTA 780  
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

(2) INFORMATION FOR SEQ ID NO: 751:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

GTAATATCAA TCTCTTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTTG 60  
 TCACGAACCG CTACAACTAA CATTTTATCG TCTAAAATAA GTTGTTTATA TTTTCTAAT 120  
 5 TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTAAAC 180  
 AGTTTAGTCA TTCTATCACT AAATGTTCCA CTTGTTGAGA TAAGGGAGAT TTCAGAGTCG 240  
 TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA 300  
 10 CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTCGC CAGTGTCAAT TACTACAGTA 360  
 ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTTGTTTAT tTAATCTTTT ACCCTTCTTA 420  
 15 TnATAAAGTA AAACCCTTAC ATTATTAAGT nATAAGTCTT CATTCGCATT AAACG 475

## (2) INFORMATION FOR SEQ ID NO: 752:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1019 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT 60  
 CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT 120  
 30 AAACCATTAG AACACGTGA ACACGCAAAT GTTATATTAC CAAATAACGA TCGTCACCAA 180  
 ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCT ATATTCAAGT TGAAGCACCT 240  
 35 ACTGGTACAT TTATTGCTTC CGGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA 300  
 CACGTCGTAG ATGCTACGCA CGGTGATCCT CATGCTTTAA AAGCATTCCC TTCTGCAATT 360  
 AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AAATCACTAA ATATTCAGGC 420  
 40 GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA 480  
 GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT 540  
 GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC 600  
 45 ACTTACCTCA AAGGCGAACT ATGCAATATG ATTTAAGTAC AACTGGTGGT AATTCAGGTT 660  
 CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG 720  
 AATTTaATGG TGCGGTATTT ATTAATGAAA ATGTACGCAA CTTCCTAAAA CAAAATATTG 780  
 50 AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA 840  
 ACAATCCTGA TAACCCTAAC AACCCAGATG AACCAAATAA CCnGACAAC CCTAACAACC 900

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA 1019

(2) INFORMATION FOR SEQ ID NO: 753:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

15	ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA	60
	TCTTGTGGCA CAACATGAaT CGCATTTTCA AAAATTGCAT GTCCTGCTTG ATCAGTCAAA	120
	CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTTGGCGTT	180
20	AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTTCTT CATCTACTCC AAAATTACGT	240
	AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA	300
	GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTT GATTTTCGTTT ATTTCATTG	360
25	TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAAACA TTGCACCGCC ATCCATTTTT	420
	GTATTGCCAC CATTTAGaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT	480
30	CTTCTGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT	533

(2) INFORMATION FOR SEQ ID NO: 754:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

40	ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC	60
	GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC	120
45	TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt	180
	TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTTCA AGAACTATt TAGAGTCAAA	240
	AGGGTATGGA AAAGAATTTG GACATTCACT AGGACATGGT ATTGGTTTAg AAATCCATGA	300
50	AGGGCCAATG CTGGCTCGTA CGATACaAGA TAAACTTCaA GTTAACAACT GTGTTACAGT	360
	AGAACCTGGT GTTTATATAG AAGGTTTGGG CGGTATAAGA ATAGAAGATG ATATTTTAAT	420

AGCGTGTAAG ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540  
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600  
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660  
 AAACGTTTAC AGCTGGTGAA AAAGTTGAAC CAGCAATGAT TGAAAATCGT CGCATGCAAT 720  
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780  
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840  
 AAATTCAAAC ATACGAAGGT GAACTATTCG GTGTTGAATT ACCTAAACT GTTGAATTAA 900  
 CAGTAAGTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTAATCGG 960  
 15 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTATT TGTAACGAA GGTGACGTTT 1020  
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTTAAC 1080  
 20 AAATAGCTTG TATTCATAT ACTGATTTAA CGTAAGAAAT TCTAAATAAG TCTCATAAAG 1140  
 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTTATT TTTAAATAA 1200  
 TTTTAAAT ATAAACGAA TCGTC 1225

25 (2) INFORMATION FOR SEQ ID NO: 755:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1265 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

ACAAACAAAT CACTTAGTTA AAATTGACAG TGCATTATAT TCCGATAAAT TATTCAACAT 60  
 TGTAGAAAnn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120  
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180  
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240  
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300  
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360  
 GTAGGTCCTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420  
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480  
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540  
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAACAC ATATAAATTC TAGAATATAC 600

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TATGATTTGC CTTCAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA 720  
 ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC 780  
 5 CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTTGAAGAA 840  
 ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA 900  
 AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTAAAG AGGAAATAAG CAATGGCAGA 960  
 10 AGGACAAGGT TCTTATAAAG TAGGTTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA 1020  
 AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT 1080  
 15 AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG 1140  
 GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCA TGaGTaTTTT CaATATTCCa 1200  
 AGTGaTGaTT TAAaCACaGT TaTTGCaCGT ACTAAAGATA AAAATGGGTA CATCTTGGGT 1260  
 20 AGGAG 1265

## (2) INFORMATION FOR SEQ ID NO: 756:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

CATATACCCG GGTTCaAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT 60  
 ATTGTtAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT 120  
 35 TTGAAATCCA GGTtGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA 180  
 GGCCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG 240  
 40 TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGGAATA GTAATCAGAT ATTTGAGCTA 300  
 CTTCAATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT 360  
 TGTTAGCACC TTCTTCGCTA TAAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA 420  
 45 TAACTAGCAG TTTTTTATTA TGATTTTTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT 480  
 GCATGCCATT TTCTTTATCA TAAGTGAATA AATCACCTGT TTTTACTGTA GTATTGCTTC 540  
 CAATATCTGT AGTACCGGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT 600  
 50 TCATTAAATAT GGAACCTAGC AATAGTGTTG TTGTTACTGA GCTGACTATA CGTGTTTTCA 660  
 TTTTCATCAT CCTTCTATTT TTTAAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT 720

GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTTAAGAATA TGTTTTTAAAC 840  
 TTTTATTTAA AATTTGAAAG GAAGCATTTC AATTTGAGG GTTAGTCAA GTTGAATAAA 900  
 5 TTCTTTATGA AACAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTA AAACTAA 960  
 TGATTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020  
 10 TAAATCAATT AATTA ACTAT TAAATAAAAA TTA ACTATAT ATTA ACTAGT GTAAATTAAT 1080  
 AAATAGAAAT AGAGAAAAAG GGTATTAATT A 1111

## (2) INFORMATION FOR SEQ ID NO: 757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAT AGGTACATAA TATTTTTAGG GTGGGTTATA TGAGCATAAT 60  
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120  
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180  
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAT AAAATAATTG GTTTAAGTGG 240  
 30 TATGTGTAAA ATGATGTTTT ACGAAWAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300  
 TATACATTCT GAATTTAGGA AAAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360  
 35 ATTTTCTAAA CGGTTGAATT GTAAAGCmAT AaCACTAAAT AGTGGTAATA GAGATGAnAG 420  
 ACATCTGCAC ATAACTATA TAGTGATAnT GGGTATGTTA GCAATA 466

## (2) INFORMATION FOR SEQ ID NO: 758:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60  
 50 TATTCCGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120  
 TIGTTTTTTA AAGATTTTAT GTAATCtCTA TATTTAAATT CGAATATTCT TTTTATACC 180

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AACTAATATA TWCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300  
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360  
 5 TGTCGATTG AAGTGTGCGC CCTAAAACAG TAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60  
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120  
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180  
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTGAG 240  
 25 GGAAACTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTTCC GTGGTTAATT 300  
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGTnnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

40 CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60  
 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATCt AGGCTACTAT TATCTATTAT 120  
 TTTAAATTTA CCTGTGTGGG TAGTGTGTT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180  
 45 AATTGTAGcT ATTCCTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240  
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGGCGACC GTGTTTTACT AGCTATTTAT 300  
 TGTTTTAGT TCTTTTGTG TCTAACAATT TCACTTTGTG ATTTTCCCA TCAATTTTAT 360  
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

(A) LENGTH: 639 bas pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

10 GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA 60  
 CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA 120  
 TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT 180  
 15 ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA 240  
 TATTCACCTTA AAGTTGGAAT TTAGCATT TATTATTTT GTACTTTAAA TTATTTAGTT 300  
 CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTGC TGTGTTACTT 360  
 20 ATGCTTTTAG TTTATATATT TTTAGGAATT TTAAAGAAAT GACATGAAAC AAATTAGCAT 420  
 TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA 480  
 25 AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAAATGA 540  
 ATATGnAAGC GGAACCGCCG TTATTTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT 600  
 GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA 639

## 30 (2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

40 nTGTTTCGTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT 60  
 CTTTAAATAT CATTCTTGCA ATAGTGA CTC GTTGTTTTTC ACCACCAGAC AATTATCTC 120  
 45 CCACTGTACC AACATTCGTA TCATATCCAT CTGGCAACTT TTCAATAAAT TCATGACATT 180  
 GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA 240  
 TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT 300  
 50 CGTTAAGTTG TTTCGATTCA ATATCTTTTA TATTATACC GCCAATCGTA ATTTACCTG 360  
 AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGA CTTACCG CTACCAGaTG 420  
 CCCCACGAT AGCTGTGAAA TTATTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA 480

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	GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACCTT	600
	CAGTTAATGC GTATTGTATA GACTTTAAAT GATTACATA ATTAGTAAAA TTCTTAATCG	660
5	GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT	720
	TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC	780
10	TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT	840
	AATTATCTAC TG	852

(2) INFORMATION FOR SEQ ID NO: 763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 852 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

	CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT	60
25	AAATTTAGAT TGATTTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GGC GTTTGCC	120
	TTTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAT	180
30	AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT	240
	TACTTCAGCG TTCaTTCCaG GAACAACCTG TTTAGACGGT TcTGATTCTA GAGTGATTTT	300
	AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTAA	360
35	TGAAAgtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT	420
	TGACCGTCAA TAGTCACATC AACATCTTTA CTTACTTCAA CATCTTTAAT ATCTTTTTCG	480
	TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA	540
40	GCTTGACCA TTGAACCTTC CATACCATCT AATTGGCAA TTGTACCTTT TTGAGGCATT	600
	TTAAGATCCA TATCTTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG	660
45	TCACCTTTAT CGAGTTTGTC ACCTTGTTTA ACATTAAAGTG ATTTAATTTG TCCAGATGCA	720
	GGACTTGCTA TTTAATTTG ATCGCCATTT ACTTTGTCAT TATCAGTTGT TACATAGCTT	780
	GTTGTTTTAT TCCAAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACAACCGTA	840
50	ATGACATTnA AT	852

(2) INFORMATION FOR SEQ ID NO: 764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: doubl  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

	ACATATTCGA CATTCAATTTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC	60
10	CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTGTATTT	120
	ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTAA	180
	YTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT	240
15	TATTTTTAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTTGGG TATGCAGCCA	300
	TTTTTATATT AATTTkATka GAAAATGTAC TACCTaTCGT aCCATCGGgA AATTATTCTG	360
	ACATTTGCTG GTCTTATGTC TGTTAAATCA CATTTATCAA TTTTAACTTT ATTTATTATT	420
20	GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTCA	480
	GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG	540
25	GATTTAAAGC GAGCAAATGA TTGGTTTAAA AAGTATGGCG TATGGGCTGT ATTkATCTGT	600
	CGTTTCATAC CTGTATTACG TGTaTGTATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT	660
	GTTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT	720
30	TTACTAGGAC GCACTTTGAG CGATAGC	747

(2) INFORMATION FOR SEQ ID NO: 765:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 820 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

	TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA	60
45	TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTa ATGGCATGTT TTTCTCCATT	120
	TTCCAACATA TTGACATACA ATTTATAATG TTTTTCAACT GCCTGAATAA AAGCGAGTTG	180
	ATTTTTATTT AAATGTGATT TTAACCTTTC TAAATCTGAA TTAATAAAGT CTCTATAGT	240
50	CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG	300
	TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT	360
55	AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT	420

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TGTTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540  
 CGCTTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTGA GCTGCTGATT 600  
 5 ATCACGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660  
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720  
 TGACTGACGC AGCTCATTTA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780  
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTATnATT 820

(2) INFORMATION FOR SEQ ID NO: 766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 672 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60  
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120  
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAAGA 180  
 30 TAAGCTTAGT GAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240  
 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300  
 TAAAATTGAA TATGTAGATG AAGTTAAAT TGAATTTATG ATAGATGCAT ATCAAAAGTC 360  
 35 AAGGGcTGAG CaATTAATTA AACAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420  
 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAAT 480  
 GACATTGGAA GATTTCCGAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540  
 40 TGTGGTGak TCTAATCAGA AAATTAAACG TATTGcAATT ATTGGTgGTT CAGGTATTGG 600  
 ATATGAATAT CAAGcGTCC AACAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660  
 GATGCCTAGA TG 672

(2) INFORMATION FOR SEQ ID NO: 767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

GAAAAAGTTA AACCTACTGT AACTACAACA AGcmAAGTTG AAGACmATCa CTCTACTAAA 60  
 GTTGTmAGTA CTGaCACAAC AAAAGATCAA ACTAAACaC AAAGTGCTCA TACAGTTAAA 120  
 ACAGCACAAA CTGCTCAAGA ACAAATAAA GTTCAAACAC CTGTTAAAGA TGTGCAACA 180  
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240  
 GTTACAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300  
 GGTTTAACTT CAGTTGATAA CTTTATTAGC AcAGTtGCcT TCGCAACACT TGCCCTTTTA 360  
 GGTTCATTAT CTTTATTACT TTTCAAAGg AAGaaTCTAA ATA 403

## (2) INFORMATION FOR SEQ ID NO: 768:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTTTGCTTG CGTTAGTAAT TTCTAACATA TTCATTCACTA TTTTGGAGCC 60  
 TAAACTATCA ATCACCCTC AAATCATCAT CGTTTGTATT TTAATTGAAG CACTAATTGG 120  
 ACTGCGTTTC TTGAAAGCGT ACGATGTTAA GCGTGGCAAA GATAAAGAAA ATAAGAAAAA 180  
 TAGTAAGGAT TTCGTAAAC TAAATCAAT TTTAGTAGCA ATTTTATTTA CATCATTGGC 240  
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300  
 TGATTTAATC GTTTGGAGCA TAGGTGGTAT TATATTGGC CTCGTATGTT ACACAATGGA 360  
 AGATAAAAGA TAACGATAAG GAGCTGGCGA TTATAAGCT AGCTCCTTTT TTAACCTaTA 420  
 TATGTAAAGA aCTaTCCTAA GGGkTTTTAA TCATATGTCA ATAATTCTA TAATACATTA 480  
 TTA 483

## (2) INFORMATION FOR SEQ ID NO: 769:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTTAAAGAAG 60



GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180  
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240  
 5 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300  
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360  
 10 nTAnACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

## (2) INFORMATION FOR SEQ ID NO: 770:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTTAC ACGGGCAACA 60  
 ACTTCTCTAG GTkAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120  
 25 ACCCGATCAA ATTCATCATT TTTCGCCGTT AACATTAATA TAGGGACTAA ATTTTATTTT 180  
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTATG GTAGCATAAC ATCTAAAATA 240  
 ATTAAATCTG GCTGTTCACT TTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300  
 30 ACAACTTCaT AACCAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360  
 GTCATCTACT wCCaACACTT TTTCGCGACAT GGtATGCCTC CCTAACTtak AATTATATTT 420  
 35 cATTATAACC GAACTATTTA TAAAAATAmC ATCCTACACA TTATCTTTAC ACATTTTTTA 480  
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCTT TCTmTCATTT GCATGACTTA 540  
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTC TATCCCACTA CCTATGCATG 600  
 40 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTCGC TTTGTCTAAT GTGTAAGAAA 660  
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720  
 45 CATTTAAAAA GGCGAACCTA GCAATTAAAG 750

## (2) INFORMATION FOR SEQ ID NO: 771:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

	ATTTAATTAT TATTTTCCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTTGGTGC	60
	TGAGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT	120
5	GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG	180
	ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC	240
10	ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC	300
	ATCTTCATTG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTG	360
	GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT	420
15	AGAGTTGCCA CTTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA	480
	ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA	540
	TCGTCTTG TG CTCACAACCA TTATACAACA ATCATTCTA AAACAACAGT CATATTACAA	600
20	TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG	660
	CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC	720
	TTcAACAAAT GGAATGCAC TTGATTCTTG ATATACTTCA AAGTCCGCAT TTTGGATTAA	780
25	ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTTCCTTCA CCGAATTCTC CTGCAATAAT	840
	TTTTGTGGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC	900
30	TTTAACTGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG	960
	GAATCGATTG ATTTTCTCG GACGATAATA CTTACGCTTA TTTAAAAATT TAwCyTGtTT	1020
	TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA	1080
35	TTCACTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG	1140
	TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACCTTCTTC	1200
	AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG	1260
40	ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAACCTT GAAATGATTT	1320
	TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA	1380
	TACGATAGGA TAGCCTTCAC CTAaNGTACT GTAATGTATC GATGTTCCAT CTTTTCTAGT	1440
45	AAATAGATCC ATAATTTTCT CC	1462

(2) INFORMATION FOR SEQ ID NO: 772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 704 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

5 ATTATTATAA GGAGTTATCT TACATGTTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60  
 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTITAGAT CAATTmGGTG 120  
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180  
 10 AACAATTAAA TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTCAAAGC GATGAAGAGG 240  
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300  
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360  
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCCT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420  
 AAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GGCGAATTCTG 480  
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAGCGAG CTTAGAAGCA AATGTTAAAT 540  
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTCA GCTAGTCCAA 600  
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCAATAC AATTCTTAAA AGAAATCGAA 660  
 GAGCGTGCAC CTTTAAAAAC CGTAATGTTG ATCCAGTAGA AGTA 704

## (2) INFORMATION FOR SEQ ID NO: 773:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

35 GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCcTTTGa ATtGCATAGA 60  
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTA AAATATTCAA 120  
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTGTG TCATTTCAGG 180  
 TGTCATGACA TGCGCAAATT TCATTAAGAA AAATAACACA AACCCACCTA AAATATTTCC 240  
 45 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300  
 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAATAA 360  
 AATCAAACCT AAATAAACG CAATGGCTCC CATTAAATTG ATAAGTCCAT CTACGTGAGT 420  
 50 ACTCGCA 427

## (2) INFORMATION FOR SEQ ID NO: 774:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

	AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAAACTAA AACTATGCA AAAGATGTAG	60
10	ATATATTATT TATTCTTGGC GGTGATGGCA CGGTTAACGA ACTTATAAAC GGTGTTATGA	120
	CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA	180
	AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA	240
15	AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG	300
	CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAAGAT GTATTGGGTA	360
	AATGGAGTTA TATTGGGTCC ACCGTCCAAA ACnCGGCnAA	400

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(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:

25

(A) LENGTH: 484 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

	AATTATTCCT CAATAGGAGC ATTACCGCT CTCTCACCAA TTCCCAAAAA TGTAGTTTCT	60
	ATTTGCTTTG CACCATTAA AATTGCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG	120
35	TTATGACAAT GAGCAGAAAa AATTATGTTA GAATATTTTT TTACAAAGTA ATTAAAAATA	180
	TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCGG CAAATGTAAC TGTTCTAACT	240
	TGATATTTTG AAATAATTTT CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCT	300
40	TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTTCTTTA ATATATCCAA GCAGTCTTTG	360
	ATTTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTATATG CAAGTCAGAT	420
45	ATTGGCAATA GTATTTtTAC CACTAAATTA TGAATTTtCA ATtTGACTAT TTTTgGTATG	480
	TCnT	484

(2) INFORMATION FOR SEQ ID NO: 776:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 788 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

	CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG	60
5	AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT	120
	AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTAA AAAAAGTCT TGAAAGGTTT	180
10	CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT	240
	GATTAGCTAG TAATGTGTTA TAGTTTCCCT TTTCAACTAT TTTACCATT TATCATCACAA	300
	TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG	360
15	CATGTGCTTC AATTAAATCC ATAACTTTAA AACTATTTTG TTTATCTAAT GCAGTTGTTG	420
	GTTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC	480
	GCTGAATTTT TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTTGACGT CTAGTGCCA	540
20	AATGTTCTAA ATCTAATTGC TTAAATATTG CTTGCACCGC TTCATCTTTT TCATCGGTAA	600
	ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG	660
	ATTCAAACCT ATCTTTGTCA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC	720
25	CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTT CCTGAACCAG	780
	AAGGACCC	788

## (2) INFORMATION FOR SEQ ID NO: 777:

30	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 1145 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
35	(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

40	TTACAAAAGA AATGCAACAA AATTTTGTAA TCATTACATT TTTTATAAA AATTTCACTT	60
	TAGATTCACA ATAATTACTT ATTTTGTCAA TTTATTTAAT GTCAATATGT TGATTAATTA	120
	ATAGTGTTGT CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA	180
45	TTTCGAGTTG AAATTTATCT TATTATTTT CCACTTTTAC GTGCTATCCC ATTACACAAA	240
	AACAAATAAG TAAAGATATT AAGTACAAAA AAGTGGAACA CCTGTAGAT GCTCCACCTC	300
	AATTATATTA AGTTATATTA TTTTGCTGCT TGGTATAATT CATCAACTTT TTTCCAGTTA	360
50	ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATTT CAGATAGTAG	420
	GCATGCTCCC AAACATCAAA TAGTAAGATT GGTGTTTTGC CTTCTGTAA TGGATTATCT	480

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	GATCCAAATA ATGTTGTGTC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC	600
	CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTCTT CAGAATTAGG TGATAGTATT	660
5	TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC	720
	GCTTCCGGTA CCTTGTCTAA GTnAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT	780
	GTTCTTCAA CTGTTGCGTT TAATTTTCGTC ACGTACGTAT TGTGATGTTT GTCGTGATGA	840
10	AATCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT	900
	GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTTATGAA TATACTTTTA TAATAATTAA	960
	TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTTGTTAT ATCCAATTAT ATAAAATTTA	1020
15	AATATTCGAA ATTGATATAA TATTTAATAT TGAATGCAAA AAGGCATTTA ACTGCTTTTG	1080
	TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTTCAATAA GAAATTGCCT	1140
20	TTTCT	1145

## (2) INFORMATION FOR SEQ ID NO: 778:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 902 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

	AAAAGAGGnC CAATATTATC AATATACGGC CGGAAGATTC CCTTTTTCTT CTCCACTTAC	60
	TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA	120
35	ATTGTGGTAT CAAAGCTATT CGCTTTTCT CCAATAATGT CTTTACCATA TTTATTGAAT	180
	GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA	240
40	AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTW TCTAAATGGA	300
	GTTTCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG	360
	TACACATATA CAGGTATCTG TCCGTCTACA TAGTAACTAT GTACGAACT AATTACTGCA	420
45	AAATGCCATA AATATAAACT ATAAGACCTT TTCCCGATAA ATACTAACAC TGGATTTGAA	480
	AATATCTTCG CtATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT	540
	ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA	600
50	AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA	660
	ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC	720

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ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840  
CCTATTTTGT ATCGCTTTT AATTGTTAAC AATAATGTAA CCAAAATAAC TGGGAAAAAT 900  
5 AT 902

(2) INFORMATION FOR SEQ ID NO: 779:

- (i) SEQUENCE CHARACTERISTICS:  
10 (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60  
20 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTTCGATTGC TTCATTTACT 120  
ACTTCCAACG TACAGTCTAA TGCTGTAAAA ACACCAGTAA CTTCAACATC TTCATCACCT 180  
ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240  
25 AATGTCATTA AATCAGCTAT TTTCATACTA TAACACCCTT TCAATTACaG CAATTTTCGTC 300  
aTTAATTTGa GCTAAAcGTT GakGAKGTTG TTCAGTAwTG AGtTTCGaTT TAAtATGATA 360  
AAgTGCyTct AACTctCTTT GcCATTTtTT TATAAAATAT 400

30 (2) INFORMATION FOR SEQ ID NO: 780:

- (i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 557 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTCCTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTTCAGT 60  
TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTTCGTTT CATTTTTAAA ATGTACTGTG 120  
45 TAAGTnGCTT TTTTTCGATA TTTTAATTCA CGTTCCTCGA TACCTCTATC ATGCTTCAAT 180  
ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAATTTTT 240  
AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300  
50 TCTGCTTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTTCGCA 360  
TGAAC TAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCTTTT ACCACCATTT 420

CTATCATGCT TCAGTACTGA TTTTATTTGA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540  
 TTATnTGAAA ATGAAAG 557

(2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60  
 TATATTTTAT TGAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TGTAGAAACA 120  
 TCAAGCCCAG CTTGAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180  
 TGTTCACTACT GCTCCAAGTT ATCATTAAAT CTAAATTTAA TACTTACTTC ATTTTAACT 240  
 GGAATAAAAT GTACATCACT CGCTTTCATT TCTATCGCTT TATTAATTAT TTCTTGAAAT 300  
 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360  
 ATTAAACCGT GTAAAAATGG ATTAAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420  
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

(2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60  
 GAAGACGGTG ATTTCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120  
 CATGATTCAG CGTTACACAT CTTTGGTTTA TTGTCTGACG GTGGTGTACA CAGTCATTAC 180  
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240  
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAAATCCG CTTTGAAATA CATCGAAGAG 300  
 ACTGAAGCTA AATCCATGAA TnAGGGCATn GGCCATTTGC ACCGGGGCCT GGCCGTAATA 360  
 AGCCAAAnGGA CCGGGCCAAC CGTTGGGACC GGAAGAAAA 400



## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 810 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

GATTAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC 60  
 ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGTA 120  
 TAAAAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT 180  
 ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTTCG ATTTGAACAG 240  
 GTTTTTTTTG AGGTGCAAAT CGTTTAACAA CGTTACCyTC GCGATCCACT AAAAAGTTAG 300  
 TGAAATTCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA 360  
 ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTTTTG ATGCATAGGG AAGGTAACAC 420  
 CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTGCGCTGA ACCAGGTTCT TGGCCACCAA 480  
 ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTTGATC TTTGTATTTT TCGTATAATG 540  
 ATTGCAAAAC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA 600  
 TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA 660  
 AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTTAC TTAAaATGTA CCACAAAATC 720  
 GTGTAaTAGT CTkTACTAxA ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAAGGA 780  
 GATGTATAAC ATGGnTCAGC AACAAATTCA 810

## (2) INFORMATION FOR SEQ ID NO: 784:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTTAAACGAG CGTTGCAACA 60  
 TATCTCGAAT TGTAAAGGAG CTTGAAAATG AATAAAAATA TAGTCATTAA AAGCATGGCA 120  
 GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA 180  
 CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTTCCATAT 240

ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGGCGATA GAATTACTGC CCATCCAAAC 360  
 GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT 420  
 5 GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT 480  
 AATTTTAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA 540  
 10 ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAAATAGTT TTAAACAGTT TGAATCTACA 600  
 GGAActATAA AAAGAATsAA AGACAATATT TTAAATTTTG GATGCCATAC ATTGGAACCC 660  
 GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTCATAGGT GTGGTGGTAT 720  
 15 GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC 780  
 CTCCAdAT 788

## (2) INFORMATION FOR SEQ ID NO: 785:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1023 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

30 CAATATTTTA GAAACAaTAA TTAActTGCG ATGAACAAAC TATTAACAAT AATCTTGAGT 60  
 ATTATATTTA TCTTAATTAA TAATATATTT ATTTAAGATT ATGTTACTTC CAACTTTCAA 120  
 AGTAGAAAAA CGGTATAATT TGTGATGGG TGTTTATTGA TAACTGCAA AAAATACAGC 180  
 35 CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA 240  
 ACTTAGTGCC AATTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA 300  
 GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTGA TATTTAATGA 360  
 40 TGGTTTCCCA ATTTTATAAC CATTTGATTG TGAAAATGAG AAATAKTTCT TCACACCTTT 420  
 AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG 480  
 45 ATGTGTTGCT GTTGTGTTAT TTTGGAACT TGGTACATGC ATACGATGTG AATTGTGACC 540  
 ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAATTTT 600  
 AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG 660  
 50 ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC 720  
 AATAAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA 780  
 TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTTGCGTA GTAATGAAGT GGTGGTTTAC 840

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TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960  
TGGCACAATG TTTCTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020  
5 AGC 1023

(2) INFORMATION FOR SEQ ID NO: 786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60  
20 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTTAATA 120  
TTTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180  
TATTTAGGTG TGTCAATAGT AACGTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240  
25 TCTGGCGTTA ACCATTTTAT TTCAGTATAT TTAAACAATG AACCATCCTT AAACCTCTCTT 300  
GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTAGC TTTATTATAG 360  
30 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGcTG AACCTTCATT CACTAAGATG 420  
GATATATCCA TGTCTTTTCG TCTTTTAAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480  
TTACCTT 487

(2) INFORMATION FOR SEQ ID NO: 787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 803 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60  
TTAAAATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120  
50 AAACATAGAA TAGTACAGTA AACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180  
TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAATCCTG 240  
CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAACATT AAAGAAAATG 300

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TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA 420  
 TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAATAT 480  
 5 CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA 540  
 TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG 600  
 10 TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT 660  
 TAAITCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT 720  
 AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT 780  
 15 TCTATGACGA ATGATTACAC TTG 803

(2) INFORMATION FOR SEQ ID NO: 788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT 60  
 30 ATTAGTGA CT TTTCAAAAAT TGATTAAAGA CTAAAGGAGT TTAAGATGAT ACATCAAAAT 120  
 ACGATTTACA CAGCGGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT 180  
 TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA 240  
 35 TCGTATGAGA CACCAGCAAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC 300  
 AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT 360  
 TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTGGAATA 400

(2) INFORMATION FOR SEQ ID NO: 789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 762 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

GTTTAAAGAT GGAGAGATTA TTGATTTTTC AGCTGGAAAA GGTGAAGCGG TATTGAAAGA 60  
 TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA 120

ATGTCATTTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240  
 TGTTGAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTTTCATGAT 300  
 5 TGGTAGTAGT GATTTGACTA TTTATGGCAT ATTCGAAGAT GGTTCAAAAG AACTAGTATT 360  
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420  
 10 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480  
 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540  
 CAAGTTTTCC CTCAAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600  
 15 AATATTGATG AAATTGCAGC AATCACAGCT ATGAAACATG CTGGTGCACA AGTAGTTACC 660  
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720  
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

(2) INFORMATION FOR SEQ ID NO: 790:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCTTTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60  
 TATTTGTCAT CATTGATTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120  
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180  
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATTG TAATTAAAGC 240  
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACCTTT CTTTTTAAAC TGTTTGACAG 300  
 40 ACCAACTGT TCTATATAAC GtATCTtAT TTGTnCTTT TCTTTCTTAC TTATTTTTTT 360  
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

(2) INFORMATION FOR SEQ ID NO: 791:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

AACGTAAAGC GGAAGTTGGG ATGGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT 120  
 ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTTnGAA ATTGGAATTG 180  
 5 GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTTCAGCG TTGACACGTA AAAATGAAAA 240  
 TGCCCTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC 300  
 10 CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC 360  
 ACATGGGGGC AGAGTnACTT ATGGACCGTT GAATGnGATA 400

## (2) INFORMATION FOR SEQ ID NO: 792:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 678 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATAtA 60  
 25 AtTTAATTGG CAACTTTTTG TCACCTTCAT AACTTCAAA TTTTCTCCAA AATTGACCTG 120  
 ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA 180  
 30 CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA 240  
 TTGGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT 300  
 CTCTAAGTTC CTGaATTCAA ATAGGATATG TATTGTtagT GGCyTTTGCT GCTGGTTTAA 360  
 35 CTTCTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG 420  
 AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT 480  
 CTGGAGCTTT TTCAGATGTT GTTGTGGGAC TTGCAACTGC TTCAGTTTTT GGTGTGCTT 540  
 40 CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTGTGTG TCGCCATTG ACATTAATAA 600  
 TAAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA 660  
 45 TGATTTAAAT TCTTTTTG 678

## (2) INFORMATION FOR SEQ ID NO: 793:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60  
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120  
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180  
 TGTCAGTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240  
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300  
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGGTCCTT GGAACCACTT C 351

(2) INFORMATION FOR SEQ ID NO: 794:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTCGC GTCTTGCTGC 60  
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAACAACA 120  
 CATGTTGAGA CAGTGGCATT ATTCAATTTG AAATAGCGCA CATGATTGTA GATAAAATTT 180  
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTTACTTT 240  
 CTTGATATGA ACTTTTTTAA TTAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300  
 AATGTCATGA TCGGGAGGGT TGGTAATGCA TAAAATTGAT TTAACGACAA ATAATTTTCA 360  
 35 AATGCGAGGT TTATTATCCT GGCAACCTGG TTATTGCGTT 400

(2) INFORMATION FOR SEQ ID NO: 795:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 407 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGTCAATG AGTTTTATAA 60  
 50 TTGTATTTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120  
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAGATA 180  
 TTAATGGTTC TAAAAGTTGG ATAAACTTAG GATTTATGAA CTTACAGGCA TCTGAGTTAT 240

TAAGTAAACC AAAATTAATc TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360  
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1053 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTTGTTGGAT ACTTAGAGTT ATTGTTCCGG CCTTTACGTC 60  
 GTTTAGTCGC ATCATTTACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGATTCC 120  
 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGG TGCTCAACCT ATTGAAATTA 180  
 AACAAGGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240  
 TTTTAAAAGA TATTAATTTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300  
 GTGGTGGTGG TAAATCAACA TTAATTAAC TAATACCGAG ATTTTACGAT GTAACCTCTG 360  
 GGCAAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTTT AACGGGAAGT TTAAGAAATC 420  
 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAAATATTT 480  
 TaCTTGGTCg TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540  
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600  
 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660  
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720  
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780  
 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840  
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTG 900  
 AAAACTTATA AAGTATTAGT TGTTTGACTT CAGTACAATC TTGAAGAGAA AATTTGTAAC 960  
 AGGATGGTGG GGTGATAACA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAATAATC 1020  
 TThCTGCTTT TTTAAATTTA ATTTcGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGACT CCTGAAGTGA AAGAAGGGGA CCGTGTCTGT TTCCAACAAT ATGCTGGTAC 60  
 AGAAGTTAAA CGAGATAATG AACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120  
 TATTGAATAA TACAGAACTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180  
 10 CTAAACAAAT GGAGGTTTAT CATTTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240  
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAAATGCA GTTAAAGTAA CGATTGGTCC 300  
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360  
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420  
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480  
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540  
 20 AGTT 544

(2) INFORMATION FOR SEQ ID NO: 798:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60  
 35 GGTCAGCGAA TTAAACACCT AATTTCGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120  
 ACATAATCAG CTCGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTAACTCCG 180  
 TTATCTGTTT CTCAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTC AAC ACCTTTTCT 240  
 40 TTCATACCTT TTTTAACAGG TTGTGTGCAT TTGnTTTTTC GAGGCCACCT AAGATATCTT 300  
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360  
 45 nCTGGTCCAA TG 372

(2) INFORMATION FOR SEQ ID NO: 799:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5 AAACGACATT TGTTTAATTG GAAGAATTaG CACCATTTTT TGAGGCGGGT ATAGaTCAT 60  
 TTAATAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC 120  
 GTCAAGCGAT AGATTTGTAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT 180  
 10 TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTCCTTAT 240  
 ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC 300  
 TCCTAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAACT TAGAAAAGTT 360  
 15 AAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTTA GGTGGTCAAG AATATGGATT 420  
 ACgTTCaAAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA 480  
 CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA 540  
 20 AGGTCTAGAA TCATATTTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC 600  
 AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAACCTGAAA TTCATTTATC 660  
 25 TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAAGATAT TGGAAAGAAG AAGGATTGGA 720  
 TCGTGTGTGA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT 780  
 AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG 840  
 30 TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GGCGGTTGCT GTCAAAGTTG 900  
 CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTTTATAA 960  
 TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTAAATTAA TCGAATCAAT 1020  
 35 TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT 1080  
 TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA 1140  
 TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA 1182

## (2) INFORMATION FOR SEQ ID NO: 800:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

50 GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG 60  
 TTTGGTTTGC TTAAATTC TCTaGTGCTT TGTCTTGAT GTTTTCGtTG CAATCATCTG 120

	TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT	240
	GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCAATAAT CATTTGTCCG	300
5	TTAATCACAG GTATTAATTC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTTCATAG	360
	CCTTGTTCAA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA	420
	CGTTTATTIA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA	480
10	TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAGTTT TTTTGTTTTT	540
	AAATAATATT CAATAGCGCG CAACACTCTT TGGcGGTGTG TAGGGTGAAT ATTTTCTGaC	600
15	AGAAACCGaC ATCAAATTGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA	660
	ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTTT CATCTTCTAA	720
	TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC	780
20	TTTACCTCTA TTCGTtATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTCATATGC	840
	TGAAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTC	900
	TTCAGGTGTn ACTTTTGcAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC	960
25	GCTTATGATT TCACCATTGA TACGCTTCG	989

## (2) INFORMATION FOR SEQ ID NO: 801:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 543 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

	CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG	60
40	AAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGCTC AAATATTCAT	120
	TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTGAC AATTAAAACC AACTCCGCTT	180
	ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTTATGGC AATTTATGAT ACAGATGCTA	240
45	AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC	300
	AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG	360
50	ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC	420
	AAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAAAATC	480
55	AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA	540

## (2) INFORMATION FOR SEQ ID NO: 802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

	GCGAATTTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA	60
15	GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG	120
	CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG	180
	GTAAACGTCC ATCTGAAGAA GAACTTCAAG ATTTGAAAGA TAGATATGAA TTTATAGGTG	240
20	GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TCGCTAGTT TCAGCATTAA	300
	ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAAAAACAC ATTTCCACCAT	360
	TTATCGAAGA TCGGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG	420
25	TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG	480
	AAGCTGCAAA ATATGGTATT CAACTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT	540
30	TTATTGAATA TTGGACGAAT AAAGTCAACG AAACATTAGC TCAAATACCG GAAGAGGAAC	600
	ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA	660
	ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTAAATTAAA GAACAATCTA	720
35	ATATTGAACA TATCGCGATT GGTTGGCAAT CTGAAGGTAA TACAGGTACA CCTTGGTTAG	780
	GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAATTTTA	840
	TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG	900
40	AATGTAAAGT AGTTTTCGAT GATATTGGTG CGAATTATTA TCGTCCAAAA ATGCCGAATA	960
	CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA	1020
	AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT	1080
45	ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG	1139

## (2) INFORMATION FOR SEQ ID NO: 803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

5 TATCCnAAAT AnAAATGTGC GCATTTATCA AACCTTACA TACAATAGAG TTTTCCCTAA 60  
 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120  
 TTTTGGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180  
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240  
 ATATAAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300  
 TAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGAYT CTGCAGGTGC 360  
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420  
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480  
 TAATATGCAA ACAGTTAGAG AAAGTGAAGT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540  
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600  
 ACAATCGACA AAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660  
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720  
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780  
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840  
 30 TATTCAAACCT GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900  
 TTTAACTAA TGATAAACAG TAGTAATTTA TTAAGTAAAG AACATTTAAG ATTTTCAAAT 960  
 TAAAAACGAG AATTTAAAC ATGTGGTGC 989

## (2) INFORMATION FOR SEQ ID NO: 804:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 711 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAcCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60  
 ACTACGTTAT TAAGCTGCTT TTTTGACAC TTTATAACCA ATAGCTTAAG ATTTAAACT 120  
 50 AATCGGAAAG AACAATGATT CACCAAnAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180  
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240  
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTA ACT ACAGGTGTGT TTACAGCAGA AAGTCAA ACT 420  
 GGTCACGCGA AAGTAGA ACT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480  
 5 CAATACTATT CTGAAGAAAG TTTTGAACCA ACAAACATTA GTGTTAAAAG TGAAGATTAC 540  
 TATGGCTCTA ACGTTT TAAA CTTTAAACAA CGAAATAAAG CTTTTAAAGT ATTTTTACTT 600  
 10 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660  
 GAATTAATAG ATATAAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

## (2) INFORMATION FOR SEQ ID NO: 805:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTT CAGCC TCAAAATAAT ACTAATGAAA 60  
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATACTTCTA 120  
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180  
 30 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAGT 240  
 ATGACTTAAA TGGTCGCAAA ATTGTT CATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300  
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360  
 35 GTGCTGAGGA AGAAAGTACA GAAGCTAAAG CTACATATAC AACACCGCGA TATGAAAAAG 420  
 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTTATCG 480  
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAAA GGTAAAGTTG 540  
 40 CTCTATCTAT TAATaATAAA TTWATTA ACT TTGAGaCAAA TGCTatGGTG GtCCaAATaA 600  
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660  
 TAATTTTGAC TTCCAAACGA 680

## (2) INFORMATION FOR SEQ ID NO: 806:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

EP 0 786 519 A2

	GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA	60
	TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG	120
5	GAGAATAACC GAATTTGTTA TGTATTTCCT ATTTTAAATA TTTGCAATTG TATTAAATGC	180
	TGCACTTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATTCTTG TTCTAGTTAT	240
	TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTCTG TGGTAAAGTA CTTCAAGAAA	300
10	AAGAAAATGA ATACTTTTTG GCAGCAAAAT CAATTGGTAC ACCCACATAT AAAATTATTT	360
	TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG	420
	CCGGTATGAT TGTAGTGGAA TCAGGrTTGA GCTTTTTAGG ATTCGGAATT AGTAAAGCAA	480
15	TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC	540
	CGTGGATATG GATGCCACCT GCTATAATGA TTACATTAACT TATATTAAGT ATAAACTTTG	600
	TAGGGGAAGG GATTAAAGAT GCTTTTAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG	660
20	CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT	720
	CCATTTTTTT GACAGTTTGA AATGAAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA	780
25	TATCAyCAAG TTTATcTGAG TTATAGAAAC TTTCGTATTT TTCTTGGAAT TCTACTAAAA	840
	ATGCTTTAAC TATTTCAGCA AGGTCACCTT TAAATTTACC ATAACCTTCG CCCTCATATT	900
	TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA	950

(2) INFORMATION FOR SEQ ID NO: 807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

	GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC	60
	TTTAATAAAT ATAAATACAC ATAACACTT ATATACTTAA TTAAGATAGC ATAGTTTCAT	120
45	TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT	180
	TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA	240
	AATTTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTCaTGA	300
50	GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTAA gCgTAAGtCa TTCTGATAAG	360
	TTGTACCATT GATATTTTAT GAAATanTCh ATGAACITAA AGCGTTTATG CTACACTA	418

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 842 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

10	AAATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTC CTAATAAAAC CTTGATTTCm	60
	AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAATGw CGCAATATAA TAATAAGTAC	120
15	AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA	180
	TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA	240
	GACGTGAAGC GATGGGATAT TTAaMAAGGT TTGCATTGTA CATAAGCGTT ATGAYTTTAA	300
20	TATTTGCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC	360
	AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT	420
	TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA	480
25	CGATATATAC AGATTTTCGCC AAAAGTAATA AACAAAGGTGG ATTGAGTAAT GAAGGTATGG	540
	TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT	600
	ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAATGAAA AATAATAAAA	660
30	TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAA GAGAATAGAA AACTTTAAAT	720
	TTTTTGACAA ATATGCAAAC CTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA	780
35	TTAATGAGAA TGTTCCAAGT TATGACGCAA AATTTAAAT GAGCAATAAA GATGAAAATG	840
	TT	842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

	TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GTATATGCAA	60
50	GCATGATTTT GCCATAACTT TACCTCtTTC TATATTTAAG TACCACTTTT ATCATTCCCT	120
	ATAATATTTA ACTTATTTAA TTAAACGTAA ATTAAACACA ATACGAATAC CAAATCAAAA	180



AAAAATAGAT GTAGTCAGTT TAATTAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300  
 TTTTCAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360  
 5 ATATATTCAT TTTCAATTTA rAAATAAACA CTTAtTTAA TCACATTCTA CTTTTGAGAT 420  
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

## (2) INFORMATION FOR SEQ ID NO: 810:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

ACATTTTGTG CTGTTGTCC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60  
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120  
 TTCAACACAC TGTTTTTCAT CATTnCCATT TTAGGTGAAA TACGACTAAC TGCTTGTTCG 180  
 25 ATTGTCTTTT GCAATCCTGT TTTAACTGCA AATTTTCTC CGCCTTTGAA GCCTAATTTT 240  
 ATTAACTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300  
 CCTTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCCTGTG 360  
 30 GCTGCATTTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTACTGCTCC AGCAACAGGA 420  
 TTAATACAAG ATAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480  
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540  
 35 TGAGTCATCA TTTTTTCAAA ATCACTTTTA GATAATTTCT TATCTTCTTT TTTCAATTTCT 600  
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660  
 CTATAAACAT CGCTGTCACT TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720  
 40 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTC 780  
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGTCAAT AATTTCTTTC 840  
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCaT TTTGATAATA CCCCATTAAT 900  
 TTAGATCCTT GTGGAcCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960  
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGATCTA CATCTAAGAA GTCTTGACCC 1020  
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGTCATAATC AGCTGTTAGA 1080  
 TATTCAATAT CTTTTGTCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260  
 CCATTTTCCA TAGAATGTGC AGCTTTTTTCA CTACTGTAGT AATTTAATTG CGCTATTTTT 1320  
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGACTTATGC TTTCCAATTC TTTTACAACA 1380  
 TGTGCAATCG TTTTCACTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440  
 TATtAATATG ATTTTtATCA GTATCGAATC CAAATAATTC TCGTGATAAA nGTATTGAA 1499

10 (2) INFORMATION FOR SEQ ID NO: 811:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 620 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAAGATG CAGGATCTAA ACCACCTGAT 60  
 AATGTACGAC CACTTGGTGG AATAACyAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120  
 25 TCCATTAAAA TAATGACATC TTCCCCAATT TCTACTAAAC GCTTTGCACG TTCAAGTAAT 180  
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTCGTCAA ACGTTGAATG AACGACTTCA 240  
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300  
 30 ATAAATAGCT TTGCATCTGG TTTGTTTCGTA CTGATTGCAT TCGCTATTTT TTTTAATAAC 360  
 GATGTTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420  
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480  
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTTCTTCAC TTCTTCTGCG 540  
 TTATGGTCAT GACAAAGTCA ACTTGTAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600  
 TTCTAACTTT CCCAGTTACT 620

40 (2) INFORMATION FOR SEQ ID NO: 812:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1094 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

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TGAAGTATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180  
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240  
 5 AAAAGCATTTC TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300  
 CGAAaCTGt GCACATTTAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360  
 10 TTACTTGGGT CCTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420  
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAACTTGA 480  
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540  
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600  
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATT TTC 660  
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGctATTGc 720  
 20 GtTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780  
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840  
 AACATGGTCA AAAAaCTTAG ATATTAaaaa TAGATCTTAT GCGCTTGGAC AATTTGAAGA 900  
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAATT AAAnGTTATC TATCAGCATC 960  
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAAGTTT ATATCGAACT 1020  
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080  
 ACTATGGTAT TAGC 1094

(2) INFORMATION FOR SEQ ID NO: 813:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 930 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

45 CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTTACC CCAATCGTAA ATATGATGGA 60  
 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120  
 ATTACGTAA TTGTAAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180  
 60 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240  
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300  
 ATACCATCTA TGTTAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360  
 55

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480  
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTC AAG TTGGTTCATA CATTCAAGGA 540  
 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTATTTC GGTTATCGGG 600  
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTGTGT ACCATATTTA 660  
 GGGCCTACTA TAGCGATTTT TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720  
 CTCTTAAAAT TAGCAGTAGT ATGGACTTTA GTACAATTTG TTGAAGGGCA CTTCAATTTCA 780  
 CCAAATATCA TGGGTAAAAC ACTTAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840  
 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTAG GTATTCCGGG ATATGCTATT 900  
 TTAAAGTAT TtAGTTACTC ATTTATTCCA 930

## (2) INFORMATION FOR SEQ ID NO: 814:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGGCAA ATCTTATGAC TATATGCTTG 60  
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120  
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180  
 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240  
 TTTTCCAACA TGAAATTGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300  
 ATCACCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360  
 AAgCTTAGGA TAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420  
 TAATATATCA CTTCTAACC AAACTTTTAA TCCCTCATTA A 461

## (2) INFORMATION FOR SEQ ID NO: 815:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 573 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

## EP 0 786 519 A2

AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA 120  
 TACATTTTAC ATAAAAATGAA GAATTTTAAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG 180  
 5 TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TGCCTAGTT 240  
 CTTTCTTTTA ATCATGAAGT AGATACTTTT TCTATTATTG AACAGCCTT AATGGATCAT 300  
 AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA 360  
 10 TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAAGGT 420  
 GAAACAACGA ATAACCTAGA TTTAATTGTT GTTCTGGTG TTGGATTTC AAGACGATGGA 480  
 15 TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG 540  
 ACAATAAGCT TATTATACGA TTTTCAAATA ACA 573

## (2) INFORMATION FOR SEQ ID NO: 816:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

TAGTTTAACA ATGTCTATTC TCATAGAATT TGTCCAATA AATGTAGACG ATTTACTAAA 60  
 30 CTTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT 120  
 CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG 180  
 35 TAATAGTCCT TTTTACGTT CTTTAAATAA CTCAATTCTA TTCATTTGAT TATTCATTTT 240  
 ATTGTCTATA GATTTTAACA ATGCACCTAC TTTATCTGT TCAAGTACGAC AAGGTATTTT 300  
 AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA 360  
 40 TGCTCGTAGT TCTTTAAAAT TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT 420  
 TTTAACTACA TCGCATGAT TATTTACCCA GTATTGCCCA TTAGCAATAA AGCTACTCGT 480  
 CTCAAAGTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA 540  
 45 TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT 600  
 TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATTT TCAAAGATAA AGATGTCTTT 660  
 TATGAATTTG TTTTCCCACT CTGGATATTC TTCACCATTC TCATCTTTGA ATCGCAATTC 720  
 50 TTGTGTGAAG ATTTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG 780  
 TTCTTCTAAT TCAATTGTG GGTGAGTTT GCTGAAGAAC TTGCCTATTT TTTGCTGTTT 840

## EP 0 786 519 A2

	TCGACTACCT	CCACTTTGTG	CAAGGAAAT	TTTCCTTTTA	CCTTTTCTTG	ATAATAGATA	960
	CTGTCCAAAA	AAATTATAAT	AATACTCTTT	TTTCAATCTA	ATAATACATA	CATGTTGATT	1020
5	TAAATTAGCA	TGCGTTTCAA	CTATCGAATT	AATGGCTGTT	CTACCTATTG	ATGCTCCTGT	1080
	AATATTTAAA	AGAACATCAC	CATAGTACGT	TCTACTATTT	TTCATCTCAT	CATCTATATC	1140
10	TTTACTAATA	TAAACTAAGT	CATTAAGATT	TAATTTACCA	TTTCTAATAT	TTTGACTCCT	1200
	TAAAAATGGT	ATGCCCTTGT	TTGTATAGTT	TTCACTTCCA	CCTTTGGGAG	TCTTTCCACT	1260
	ACCTATTTTG	GTAAGTAAAT	TCCCTAAGTT	CTTCTCTTCC	CATTGCGCTT	CAAATCCTGG	1320
15	GAATCTCAAC	TCTGGCACAT	TTTTCGTTTG	TGTATTACTC	ATCTTTCAAC	ACCCCAAGTT	1380
	CTTTTCAGGT	TGCATTGATT	TCTTGTTCAA	TTTCTGCGAT	TTCTTTGTCG	ATATTTTTC	1440
	AATCTTGTTG	GACTTGATCT	AAATCAATTG	GTGCTTCTTC	TTCGAATGTA	TCAACATATC	1500
20	GCGGTATGTT	TAAGTTGTAA	TCGTTATCGG	CGATCTCTTG	TAATGTCGCG	CTGTAGCTAT	1560
	ATTTATCAAT	CGTTGCTTTA	CGCTTATATG	TGTCTATAAT	ACGTTGCGCT	TGGGCATCGC	1620
	TTAAATGGTT	TTGATTTTTT	CCTTTTTTCAA	AATCATTTGA	TGCATCGATA	AATAGTACGT	1680
25	TGTCGTCTTG	TTGGCGACAT	TTTTTAAATA	CTAAATACA	TGTTGGAATA	CTTGTCCCAT	1740
	AGAAAATATT	GGCTGGTAAC	CCAATCACGG	CTTCTAAGTA	GTTCTTTTCT	TCTATTAAAT	1800
30	AGCGACGAAT	CACACCTTCT	GCGGCACCAC	GGAATAATAC	ACCATGTGGG	AGTACGACTG	1860
	CCATGGTACC	TTCATCGTCT	AGGTAATGTA	CCATGTGTTG	AATAAAGGCA	AAGTCTGCTT	1920
	TGGaTTTTTG	CGCAAGCTTG	CCGTAACCAC	TGAATCGTTC	ATCATTTTTCA	AATTTTGAAT	1980
35	CTGCTGTCCA	TTTCGCACTG	TATGGTGGGT	TCGCAATAAC	CGCATCAAAT	GTATTGCCTA	2040
	AAAAGGCTGG	ATTTTCCAAT	GTGTCATCAT	TACGGATCTC	GAAGTTCTCA	TAACGCACAT	2100
	CATGTAATAA	CATATTCATG	CGTGCTAAGT	TGTATGTAGT	ATTGTTACGT	TCTTGTCCGA	2160
40	AATAACGATA	CACTTGCGTT	TCTTTACCAA	CACGTAACAA	CAATGAACCG	GAACCACATG	2220
	TTGGGTCGTA	CACGTGACGT	AATTTATCTT	TACCGTCTGT	GACAATCTTC	GCCAGTATCT	2280
	TAGATACTTG	TTGTGGTGTA	TAGAACTCGC	CTGCTTTTTT	ACCCGCTGTC	GCCGCAAAGC	2340
45	GCCCGATTAG	GAATTCATAT	GCATCACCTA	ACATATCAAT	TTCCATGTCA	CTGTGAACGA	2400
	ATGGTAAGTC	GTCAAGATTA	ACCATGACTT	TAGAGATTAA	AGCAGTACGT	TCTTTGACAT	2460
50	TGTTACCTAG	TCGCGTTGAA	CTCAAATCCA	TATCGCTGAA	CAGCCCGATA	AAGTCATTTT	2520
	CACTTTCTTC	ACCTAATGTA	GATGTTTCAA	CTTTGCGAAT	CGCCGTCGCT	AGATGTTCTA	2580
	TATCGAAATC	TTGCGTTTCA	ATTTACAGAA	TCATCGCACT	GAATAAATCT	TGTGGCTCAA	2640

55

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CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTCCG 2760  
 CTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACCTG 2820  
 5 CATCCATGTT CCCTCTTAAA TCATTGCGAA TCGACCATAA TTTTTTATGT AATTCAGCTT 2880  
 GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCCCT CCGCCTTTGC ATAAGTAATT 2940  
 TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTG 3000  
 10 GATGTTGGTG GTGGAAATTT TGAGTTTTAG TGGCGCAATT GTTATTGAAA AATTTTATAG 3060  
 AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTATAT TCTTAATGAT GTCAAAAAGT 3120  
 TGTTCAATCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA 3180  
 15 TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAAT AAATGTTAGT TATAGTATAT 3240  
 TTTGTCAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA 3300  
 20 TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTCAC CTGATGGCTT 3360  
 ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTTAATATAG GTGAACCAGA 3420  
 GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCACCTG ATAATACTTT 3480  
 25 ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA 3540  
 TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA 3600  
 TTTTCTACCT TTGGTTGTG TTGATTTTTT TCAACTTGT ACAACCGCAA TATCTTCTTT 3660  
 30 ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC 3720  
 ATTAGGATGT GCTTTGATTT CATCACCGAC TTTCATGTGA TAGGTAACAT GTTTATTGGT 3780  
 AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCCAGCG CCCATCCATG TAACACCACT 3840  
 35 GTATGGTGCA ACATTTGTAT TTGTAATTTG TTTAACAGTA TTTTCGGCTT TGGCTGTTG 3900  
 TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC 3960  
 40 TGCAATACTT TTGATGATTA TATTTTAT 3989

## (2) INFORMATION FOR SEQ ID NO: 817:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGCTCTAG TTGTTGCAAT GTCTGCGATT 60

	TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC	180
	CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT	240
5	CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTTCATTA GAACTAATGT	300
	GCTTTGATGG ATTTTAAATA AAAAAGTGGG GTAGTTTAA GTGTCTATCA AGCATTTAAC	360
	ATGTACCTCC TTTCTAAATT TTTGCTGTAA GCGTTTAA GGGTGTATTA ATATTATTAA	420
10	ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTTATATG ATTTTAACAG	480
	AGTGCGAATT ATGCAAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC	540
	TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTTGTGGACG TATCAGGCAA ATGATTAAAT	600
15	TTTAGGTGAT TGTGCTTGAG GTGTTTGTGTT AGAAGGCGTA TTGGTATTAT TTGATTATT	660
	AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTTT GTTGACGATT GACTGCCACC	720
	ACCGTGAGTA TTATTTTAT TTGAATTTGA GTCCTTTGGC TGAGCTGGTT GCGTATTCGA	780
20	TGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCAATAGT	840
	AACGTTATTG CCATTATTTT GATTCTTATC TGTCTGTCT GCACTATCAT CTTGTTGATC	900
25	ATTT	904

(2) INFORMATION FOR SEQ ID NO: 818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

	TTTAACAtGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA	60
40	TTAAGGTTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT	120
	CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTTACCAAC AATGTGATTG ATCTGACCAA	180
	GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTGTTT TTTAACTTTT AAAGAATAGT	240
45	TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT	300
	TGTATTTTTTA AAAATTCtTT CACATTATGT ATAGAwGTTA TAAATTAGTA TATCaCACTA	360
	TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTTACA ATATTCTGAA ATTTATGTTT	420
50	GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAAATG	480
	TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG	540



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GACGGGACGT TTTTAGATTC AAAAAAGACA TATGATAAAC TTAGATTTGA AGCGATTTTT 660  
 ACTGAACTTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG 720  
 5 TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT 780  
 TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT 840  
 GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC 900  
 10 GCGTATATTT TAAACATAC TTCTGAAGCG TTTAAAGAAG ATACGAGATT TTATTATCAT 960  
 CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAAATAGCA 1020  
 15 TTTAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC 1080  
 AATGATATTA AACTTGTCTC AAGT 1104

(2) INFORMATION FOR SEQ ID NO: 819:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1425 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

CCChTTTTAC GGATTAAngG CTTTTTCCTA TTTAAACCT ACGGCATTTT CTTTTCAACC 60  
 30 ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAATGGGG ATTGGAAATG 120  
 GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCTTTAG TGCTGACGAA TAAATATGAT 180  
 35 CTAACCTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTTACTTA 240  
 AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT 300  
 ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG 360  
 40 ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAAA 420  
 CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTAAACG 480  
 CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC 540  
 45 GTCTTTAAAT GATTCCACAA CTTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCG 600  
 AACGCCACCA CTTTGGTTGC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTGTA 660  
 50 TTGTCTTGA ATATGTTCTT CATTATCAGT TGTGTCATAT TCACTATCCA CCTCTGTTTT 720  
 TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTTCCTC 780  
 TTTTCGATAAC GCTCGATACC AATCTTTCGC TTTTTTCGCC GCAaTAGGAa CAaCatCTTT 840

TACTTCAAAT TCTTTCCATT TTTCGGGGTA ACCTTTTCATT GTAAAGGGCA TTCCCTTAAC 960  
 CTCCAATATG TTATAATTCA TGTTATATAC CACCATAATT ATAAAATGAA ACATATTAAA 1020  
 5 CACAATTTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA 1080  
 TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT 1140  
 10 TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT 1200  
 ATTTAATTCTG AAATGCTTAG CGATGTTTTT AAATATTGCT AAATACTCGC CCATTAATTG 1260  
 TTCATTTATT GTAAGTCTAT CTTCAATTAGC CATGGCTCTA TTAAACATAA AGCTAATTTT 1320  
 15 TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC 1380  
 ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTTATTTAA TTTGC 1425

## (2) INFORMATION FOR SEQ ID NO: 820:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

nCGnCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA 60  
 30 CAGATATTCA TTAATGACAC ACTCAATAGC AACCATAACA ATATTATGTT ACCTATTTAA 120  
 ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC 180  
 35 TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA 240  
 TAGAGGTGGC TATAATGTGT GGACTTAGAA GTATAACATT AGGTACAACA AATATAGAAC 300  
 AGACAaAAACa TTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAAAC 360  
 40 CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC 420  
 CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT 480  
 CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCCATTT ACAACAGTTA 540  
 45 AAGAATTAAA TGGCAATAAA TATTTAGTC TCGAAGATAA CAATGGTCAT ATTTTCTCAA 600  
 TATATTCAAA CGAGAATAAT TATGGCGTTG GTTTAGGTAT GCCTTCTTYT GAGAGTGGCG 660  
 50 TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG 720  
 ATATTACAGG TCAAATTTTA ACAAATATAT TCGGACTTGA AGTATTTGCA GAATACCAAC 780  
 CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGGAACGGGT GGTCTAGGTG 840

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ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960  
 ATGAAGTGGA AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAAATTA 1020  
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080  
 AGGACAAAAT TTATGTTACA TGAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140  
 GTCATTAATA CAGATGCAAA GAAAT 1165

(2) INFORMATION FOR SEQ ID NO: 821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60  
 TGAACCTTGT CATCACGAAT ATTAAC TGAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120  
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAGATA TATGGATTGA ATTTGATGAG 180  
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240  
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300  
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360  
 CTAAACAAAT GAGGGTACAA CnTTACGAn TnCCATTTCC 400

(2) INFORMATION FOR SEQ ID NO: 822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

TGATATAATA CTTTGTAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60  
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTAAAATGT ATTTAGAAAG 120  
 50 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180  
 GAATAATTAT GCTTGCATAC TACTAGATTT AATGTTGCCT GAAATGGATG GTATCCAGGT 240  
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

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TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420  
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTAAACATT TAGAAATAGA 480  
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTGACTC CTAAAGAGTA 540  
 CGAATTATTA ATATATTTAG CTAAAACACC AAATAAAGTA TTTGACCGTG AACAAATTATT 600  
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660  
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720  
 TGGGGCGTTG GGTATAAATT TGAGGTTAAA TCTAATGATG 760

(2) INFORMATION FOR SEQ ID NO: 823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACAG CTTTGAATGG GGGCTAATTG 60  
 TTGATATTAC GCCACCAGAT TATGAAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120  
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180  
 30 ATATTCGTGA ATTAGAAGGT GCATTAACAC GTTTACTTGC ATATTCACAA TTATTAGGAA 240  
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAAGA TATCATTCAA GCACCAAAAT 300  
 CTAAAAAGAT TACCATCCAA GATATtCAAA AAATTGTAGG CCAGTACTAT aATGTTAGAA 360  
 35 TTGAAGATTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420  
 TGTcTTGTCy AGaGAGCTTA CAGATTTCTC ATTACCTAAA AATTG 465

(2) INFORMATION FOR SEQ ID NO: 824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCACG 60  
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCàGA CTGCCCCGAA ATCGACCGGT 120

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GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240  
CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300  
5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCAnA GCGCACTATC GGTGG 355

(2) INFORMATION FOR SEQ ID NO: 825:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1099 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACCTGGC TTGTTGAcTG ACTTGTAaAT GATGATGTGC TTTGTGAATC GGATTGCGTC 60  
20 GTGCTTGATC TTGTTGAGTT TGAGGCACCTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120  
TGATTCATTG AGGCACCTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTACTC 180  
GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240  
25 TCGGATTTAC TTTCACTTGA TGATGTTGAG TCGGATTCAC TTTCACTTGT AGAACCACCTT 300  
AATGATGTGG ATGTACTAAT GGAATCAGAT TTACTTGTAC TGATTGAATC ACTTGTCGAC 360  
ATTGATGTAC TTAATGAATC AGACTTACTA TCACTTGTGG AATCACTTAA TGATGTTGAC 420  
30 AAACCTGTAG AGTCAGACAA ACTTGTACTC GTTGACATAC TCAGTGATGT TGAAACACTC 480  
TCGCTCTTAA ACGTTGACGT TGATTCACCTG ATACTTGTCTG ATGTTGAAAT GGACGTACTA 540  
CCACTTGTTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600  
35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTC AGACGTACTT 660  
TCACTTAATG ATTCACCTTAA AAAGGCAGAT GCACCTTGTG ATTCTGAATC GCTAGTACTA 720  
TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780  
40 TCGCTCGTTG ACGTTGATTC ACTTATTGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840  
TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTACTTGTAC TTAACGATGT CGAAGTACTT 900  
45 ACCGAACCAG ATGTGCTCGT AGAAGCACCTT TgTGATATTG ATTCACCTGA TGCAGTTGAT 960  
GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCaT TGAATCGGAT 1020  
TGACTTGAC TCAntGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080  
50 GTCGACGTTG ATGTACTTG 1099

(2) INFORMATION FOR SEQ ID NO: 826:

(A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10	TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA	60
	GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTAAAAACAA	120
	GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA	180
15	AAAGCGATTG AnTTGTTGAA AAAAGTAGCT GATTCCGAnC CTACAATTGA AAGTGCTGCT	240
	GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT	300
	AAATTChATA ATGCTGAAAA GTGTACCAGT TGGTATTG	338

20

## (2) INFORMATION FOR SEQ ID NO: 827:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 838 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30

	GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT	60
	TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGGCGCAT TTTGTGCGACT CTTTCTTTCT	120
35	AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC	180
	CACGAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA	240
	ACGTCCACCA TTTTCATAGC AAAGTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT	300
40	GTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTTT CAATTTATCC	360
	CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT	420
	TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC	480
45	AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT	540
	AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC	600
50	ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTG AAACATATTT	660
	GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCAATC TTTTGTATGC	720
	ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC	780

55

## (2) INFORMATION FOR SEQ ID NO: 828:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

```

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCCTC      60
TGAACTtCTC CATAAATATA ATGGTGAATA AGTATTtGTA ATGCAATTAG TAGTTGTTTG      120
ACTTATTAAA TAAGCTTTTA TAATTAAATT TTTAAATCCA TCAGTCTTAT AACCATTtTAA      180
TCGAActCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG      240
CATTGCATGC ATTTAGCATA CCCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAAATCT      300
CATATTATCC AATTGTGATA TAGTTATCAT AAAAAAGTGAT AGGTGATTAA ATTGAACTTT      360
AATGATTTGG AAATTTTtAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT      420
AAACTTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA      480
GGTGTAGTTT TGCTTTTTAG AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA      540
TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAAATGAAA      600
AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA      660
GAAATTATGA TGTGGAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT      720
ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTcATAA AAaTTAACGA CTCAAATTAT      780
AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT      840
AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG      898

```

## (2) INFORMATION FOR SEQ ID NO: 829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

```

AGTAGGAGTC ATAAAATCGn ATTTCAAAG CAATTAATGC AAAATACTGA GTCTACAGTG      60
CTATTTGCGA AAGCGTCcAT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA      120

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	AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA	240
	AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA	300
5	AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA	360
	AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCCTGC ATCTGATCAA AACTATAGAT	420
10	ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA	480
	CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA	540
	ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATCCCCAG	600
15	ATGGAACACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTG	660
	CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTCGGTA	720
	ATGATAAAGT CTTTAAAAAT GGTAAAGGTC ATGAAATGKA AGGCTTTCTG ACCGAAGAAG	780
20	AACAAAAAGC CATAAAAn	798

(2) INFORMATION FOR SEQ ID NO: 830:

	(i) SEQUENCE CHARACTERISTICS:
25	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

	AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTTGTC	60
35	ACGAACnGCT ACAACTAACA TTTTATCGTC TAAAATAAGT TGTTTATATT TTTCTAATTC	120
	ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTTAACAG	180
	TTTAGTCATT CTATCACTAA ATGTTCCACT TGTGAGATA AGGGGAGATT TCAGAGTCGT	240
40	GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC	300
	AGATTCTTTG ATTGATAnGT GnATAATCGC AGTGCAATAC ACAGAATACT GCCAAGTGCG	360
45	CCCTTAAAT TGTATTAnC TTACCTCTAT ATAAGAACCC	400

(2) INFORMATION FOR SEQ ID NO: 831:

	(i) SEQUENCE CHARACTERISTICS:
50	(A) LENGTH: 475 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

55



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	AAGTCTGCAT GACTTTTATT TGCAAGTTCG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA	60
	GGATTAGCAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA	120
5	TTAAATTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTACCA	180
	TGCAAACTAG TGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA	240
	ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGAAAAG GCTTGaTATA AGATGTATTT	300
10	TGTTTAGAAA tAGGTATATC AATCTGTAAT GGATCGCCAA CTCTTCGAT ATAACGACTT	360
	GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG	420
15	TTATAGTCTT TCGGATTATG ACTTGCTGTA ATCATAATGC CAGCAGTAGT ATTAA	475

(2) INFORMATION FOR SEQ ID NO: 832:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 724 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

	CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA	60
	TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC	120
30	AAGTACCTTG ATTATTTTGT TCTAAATGAA TGACTTCGCC TAACGATTTT AACGTAATAT	180
	CTGCACGCTC GTCCTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA	240
35	ATTGTTTGT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT	300
	TTTTCTTTT AGCTTCTTGG CGTTTTCTT TATCTTTTGG TGCTTGTCT TTTTGTCTT	360
	TTTCGTTCTC TTCTTGTTGC TTTAATTTCT CATCTTTCGC TTTTGCTTTC TCTTCTTCAG	420
40	ATTTTCGCTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTTATCGT	480
	TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTCGATAA ATCTCCGTTA TTTTAAATCT	540
45	CATTTAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGGCAA	600
	TATTAATCGC TTCATCAAGA TGTCTTGTCT CTAATTCAT CCAATATAAT AAGTAGTCTT	660
	TGTTTGAATT TGGTGTCACT TTATTAAGTA AATTTTCTTT CGTATCTGTn TCTAAACCT	720
50	GTTn	724

(2) INFORMATION FOR SEQ ID NO: 833:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

	AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAACTTT TATTATATTT	60
10	GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTA AAAATT TTGTCAAATT	120
	TAATTTTTC AAGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC	180
	TAATTTATTT ATGACGCTCT TTTGTTTAAT TGACATTCTT CAGCCATATT TTTTATGACT	240
15	AGTTGCATTT TTTACTAATA AACACCTCTA AAACCTTAAT GATTTTAATC GTTTTAGAGG	300
	TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA	360
	CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA	420
20	TGATTTACCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT	480
	CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTTGTG TTTGTTTCTT	540
25	TCTGAATATG ATGAATCGCT TTAATCGCAA CACCTGGAAG TACTTCAACA AAATCAGGTT	600
	CAACTTTTTT TATCAAATCT ATACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC	660
	TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA	720
30	CGATACCTTT TGGCTTGTAT TGCTGAATAA TAAATTCAC TGC AAATTC TCGTGGCTTA	780
	AACCTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA	840
	TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT	900
35	TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA	960
	CnGATCCAT CCTCTCTACA TCACACGCTT AAAT	994

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(2) INFORMATION FOR SEQ ID NO: 834:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 783 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

50

	Tc nACAAAGT CGGTATTAGG CTATGGGCCA TTTnACTATT ATA ACTAATC GGAAATATAC	60
	CACATAACAT CATTATTGAG TTGATTCTAT CATTGGCTT ATTAGGGTTT TTTATCATAA	120
55	TGATTTGCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG	180

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ATTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCTATTT TATTACAAA GGACGGCGTC 300  
 ATCATGGCTA AGAAAGTTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCTT 360  
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420  
 GCGTTCGGTT CTATTTTAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480  
 AATACGCTTA ACAATATACG mTTGATTAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540  
 10 TGGAAATTTG CATCGATACT TTTAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600  
 GTATTTCTTT ACTTTTAA TTTGAACATC ATCGATATTA TCTTTTAAT TCTACTTAAT 660  
 15 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTTTA GGATGACTTT AAAATATAAT 720  
 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780  
 nAT 783

(2) INFORMATION FOR SEQ ID NO: 835:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 794 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

30 TTACCTAATT TTTCAATCaT AAGATTCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60  
 TTAAGCACGA GmCACTTCAA TATATTTTTT AGAATATTCT TATAAATATT AATATGATCA 120  
 35 TTTCACTATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180  
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAaATC 240  
 TTAAATAGA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAACT CTTTTTAAGC 300  
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360  
 TATGTTAAAC AAGGTTTGGT TCCGAACCTGG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420  
 CAAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480  
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAAACTT 540  
 ACTTGAAAAA GTCGGTTTTT CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600  
 50 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCAA ATATCAACAA 660  
 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720  
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAng TGGATTACCA ATATGGTAAA 780

## (2) INFORMATION FOR SEQ ID NO: 836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTAAACACCT ATGAGACAAG ATGGAAC TCG 60  
 TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT 120  
 CGTAGGTACA TTAAAGCAT TAAACCAAAA TGATAAGAA CTATACATTT TAGGTGTGTC 180  
 AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCTTAAG GATTTAATGC ATGTTAATGA 240  
 AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG 300  
 CATCGGCAGA GTATGTAAGT TtAATTCsTT TAACACTTTC tGGCGTTTTT TCGAGACTGG 360  
 TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT 400

## (2) INFORMATION FOR SEQ ID NO: 837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTTT GGGTACAATA GCTATAGAAG CTGTGTTAAT TGCTCAAAAT 60  
 ATCGCACCTG GTTTTAATCG CGAGTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT 120  
 ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA 180  
 GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA 240  
 GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT 300  
 ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTGaTCGT 360  
 GAAGAAgTtG AAGAAaTGTA CCGTTATATT GGTAAGTAA TGAAACAACA TCCATTTTTA 420  
 TCTACATACA TTT 433

## (2) INFORMATION FOR SEQ ID NO: 838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

	ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTCC TTAAACCTGA	60
10	AGAACGTAAG CAATGATTCC AGTAATTATT CCATTTATAG TCAATGGTAT CGAAATAATT	120
	AAATTTTCA AGTAACTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT	180
	ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA	240
15	CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTAAACTAA TCGCAGTTGC AATCGCTACT	300
	AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC	360
	AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TTGCTTGAGT AATTTTTCGA	420
20	ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT	480
	ATAATTAATT CAAAAGATCC AAGTTTGTTT TGTAATACCA TATATATAAG ACATGCAATA	540
25	ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG	600
	CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTACTATAGC AGCACCTGCA	660
	CCATTAAATT TAAATGTATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA	720
30	ATTAGTATCA CTAAGTATA CGTTAATTCT AAAATTTTCA TACCACTTTT AAATATTTTt	780
	AATACTTCAC CTAATAAAGC ATTGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA	840
	TTTAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC	900
35	CTCCAATTTG AACATTaAC TCATCA	926

(2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

	CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT	60
50	TTGTTTTCTC AGCAATCTCT ACTAATTTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA	120
	CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT	180
55	CACTAAATTC TTTTGGTGCA TCAATAATAT GACATTCAAC TGCTCCCAT TCTAAAGCTT	240

CGTATCctTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCCt CckGAATATG 360  
 CTAAACAAT TTTCTCTTTC ATAAAATTCA CCTCATTGTA 400

(2) INFORMATION FOR SEQ ID NO: 840:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1043 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60  
 CGACAATGAA AATCGTCATC GACTGTAACT ACATTGTTGA CATAAATATC ATCAGGTAAC 120  
 GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180  
 AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240  
 TGTCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATT 300  
 TGTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360  
 ATGAATTTAC ACTCCTGAAT ATTTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420  
 GGTAAAGAT ATCGTATCTC TCAATTGCCA TTTAAGCTGT CTGTAGCTCG TTCTCTTAAC 480  
 ATTGGCATCA TAACCCCTAA CTTCCATTGC GACCGCTAAT TCTTCGGCGC GTTGGAAGC 540  
 TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCC 600  
 TGAACCTTATT TCAGAACCAC GCGACTTTTG CGCCAAAATG ATTTTATCTA ACTCATCCAT 660  
 TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720  
 TTTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780  
 TGTAGATaGT GTCaTAATTG TTGCAATCAT TacaATCCCA ATTAAACGCA GTGrTATATA 840  
 TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900  
 TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960  
 TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTGTCT AATCTCATAA TGAAnAngAT 1020  
 AAGTGCAAAC ACCCAAAGAT ATG 1043

(2) INFORMATION FOR SEQ ID NO: 841:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60  
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120  
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAAGAA AACTGTAGAA GTTGATGGAT 180  
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAGAT GCAAAATCTA 240  
 ATAAATATGC TAATAACCA GCTGAAGTC ACGCTAAAA AGCTGACGCh GCACTGAGAG 300  
 nTCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343

## (2) INFORMATION FOR SEQ ID NO: 842:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

25 ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60  
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120  
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAAACACCA GGTCATCCTG AATACAGACA 180  
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGGACAA GGTTTTGCTA TGTcmGTAGG 240  
 ATTmGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300  
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CGGTGATTTA ATGGAAGGTA TATCGCATGA 360  
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTmTTTAT ACGATTCAAA 420  
 40 TGGATATTTT 430

## (2) INFORMATION FOR SEQ ID NO: 843:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

50 GGACTGCCCCG ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60

55

TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180  
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAACTA GTGTAATGAT 240  
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCCTGAGATT TTCGCTTTAA TTTGAAAACC 300  
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

## (2) INFORMATION FOR SEQ ID NO: 844:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACAnTTCT 60  
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAAA ATCTTAATTG ACATTTTCAA 120  
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTTTCG ATTTGTATAA 180  
25 ATTTCTGTTT ATCTATTGCA TAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240  
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAATTTGC CATCCGCCAG 300  
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360  
30 AATTTTTTAA CCTTGGGCnG ATTACGTCTA nGGnGTATGT 400

## (2) INFORMATION FOR SEQ ID NO: 845:

- (i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 535 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

45 CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60  
TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTTGA ATATGACTAT 120  
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180  
50 TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240  
CGTTTTCACT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300  
GTTGTGTTGA TGTAGTTTCT AAAAGTAACA ATGCTGTTGA TAAACTAAT TTATTCATGA 360



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ACCGATTCCG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAACCTTAAAC AGTTAGTAGT 480  
GTTATTTAAG CAAAACCTTAT CATTTTAAAG TTGGACAGAA CAGATCAATA AGAGC 535

(2) INFORMATION FOR SEQ ID NO: 846:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 509 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTTGTATG ATCAAAATAA TGATTGTTGG 60  
CCATATCTTT ACTATGCTTA CGTGCAGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120  
ATAATTGATG TTGTTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAACTAT 180  
CTGCAAGCGA TTTCGATGGT GCTCCATATT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240  
TTACTTGTA AACAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300  
AAATGTGATT TTTATGGAAA ACATCATATT CTTTATTATT TTGTTCTGTA CGCACTCTAC 360  
CTTTAACAAT CTCTGTTTCT GGTTGCGCTA ATCTTTGCCT TACAACCGAT TTAGGTGTAT 420  
TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACTT 480  
TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60  
AGTATCTTTA ACATCGATGT GTGTATAATC ATTTTITAGAA GTATTATAAT CTTTTTCTTC 120  
TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180  
AAACTTCGCA TCATATGTTA AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240  
TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTTGTC AGTACCTTTT CACAACTAGT 300  
ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

## (2) INFORMATION FOR SEQ ID NO: 848:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTTTAAA CCATCACGAA	60
CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA	120
AAACATCTTC AAGTGATAAA TCTTGAATTA TTTCACCTCAC TAGATTTCCT CCTCATCAAA	180
TTGATCATT TCAAGCACTT GTACTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT	240
ACCAAACCTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG	300
AATGTTGTTA CACGTTTAGA TGAACGCAC TTGCATCTTG CAACTTGTGA CACGATTGA	360
AAGTTnCGTG TTTGCGGGGG TTnCACGCTC GTTTGCCCAT	400

## (2) INFORMATION FOR SEQ ID NO: 849:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTGAGG AGTTAAGAGA TTTATTTAAA GAAGAAGATT TAGAACCATG	60
GACATCATGC GAATTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT	120
TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTCGACAA AATTACTATA AGTATAGAAA	180
ATTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA	240
TATTAAAGAG CTAGAAGAAT AACTATCTT AATGTAAGAC TAAACAATAA AGCTTTGTTT	300
AGTCTTTTTA GCGTTTAAGT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA	360
ATAATATAaa GATAATTTTA GGTTTTTTAAA CTTTTAATCG	400

## (2) INFORMATION FOR SEQ ID NO: 850:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 923 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60  
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120  
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aAATGTTAAA 180  
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240  
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300  
 15 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTC TATTGATCCT TATACAAACT 360  
 ATGGACGTCC AAATTCTAAA TATGAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420  
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480  
 20 GATTTTCCTA ACTTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAAAT 540  
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTTA 600  
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660  
 25 TGCGCGCTTA ATAACAGAAT ATTCTCAATA TTTTtATTTT TTTGTGATTT GTTGAATAT 720  
 TTAGTTGATA AGGCACAATC AAATTtACTT AAActATTGT ATTAGGGGAA GAAAGGATGG 780  
 GATGTATACA TGACACAACA AAActCCCAT GGAAATCAAA TTCAAGACAT ACCTCAAACA 840  
 30 GGATTTTTTCG GGCATCCTCG AGGACTAGGC GTACTCTTCT TTGtAGAGTT CTGGGGrAAGG 900  
 KTTAGTTATT ATGGGCATGC GTG 923

## (2) INFORMATION FOR SEQ ID NO: 851:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1004 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTcAGT TGGTGTAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60  
 GCTcAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120  
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180  
 50 GGTAAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240  
 AAAGTCGGTA TAGGTCCTGG TAGAGTTTGT ATTACAAAGA TTAAACAGG TTTTGGTACT 300

GCCGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCATCA 420  
 ATGGTCATGA TTGGTTCATt WTTTGCGGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480  
 5 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCa AAAAGGCGAA 540  
 CATAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATACC 600  
 TTAAAAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660  
 10 AAATCATTAC GTACTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CGGTGATAGA 720  
 GATTAATATT TATAGTAGGT GAKGTAAATT AAAAAATTCA TAGTAACTGT TGTTCGTTTT 780  
 15 TTATCAATTA TTATCATTGC GCCAnTAACA GAATTTAAAC CATTCAATTCa TTTACAAAT 840  
 GAAGTAAGAC AATATATTGA CATTACATC AATAAAGAAA CAATTTCTGC GGAAATATAA 900  
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTTAATAATA TACAAATGAA CATGTCGAAA 960  
 20 TCAGATGTTG AGAAAACATT AAATAAACCA AAAAGAGTGA CATn 1004

## (2) INFORMATION FOR SEQ ID NO: 852:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

GTTCGCTCCA ATGTACGAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60  
 35 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTTGCATCCA CCATGTTAAT 120  
 ATTCTCTTTA TTAAATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180  
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAACT TTTATATAAA TACCAAAGTA 240  
 40 TGTTTGTTCA AAAATTTTCGC TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300  
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTTGGATAT ACTnAATGGT nncACACTCA 360  
 GTAGGAAGCA CGCATTGCT CGATAATGTA ACCATACTCA 400

45 (2) INFORMATION FOR SEQ ID NO: 853:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAACTGG AAAATAATAA 60  
 TTACCATCAC TCTTTTTGTT GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120  
 5 GCTTCTCTTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTTCG 180  
 GCTAAATTAC GTACGTCAGT AGGAACACTC TTGTCCTCGA CATTAACCTG CACATGCTTC 240  
 TTATCTTTTG CTTTGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300  
 10 GAAATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360  
 T 361

(2) INFORMATION FOR SEQ ID NO: 854:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 605 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

ACnTTATACT AGAnAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60  
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTTA TTTATTTTGT ATTGTCATAA 120  
 TCGTGTGGTT TTAAATTAAT TGTTTCTAGC TTTACAAATT TTGTTTTGTG AATGATTTTA 180  
 30 TGAATAAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240  
 CATTGATCTT TTAAATATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTG TAGTG 300  
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360  
 35 TCTTGACCTT GTTTTTTAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420  
 CAAACAATA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480  
 40 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540  
 GGTAACCTAG TTGTCTTGTT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACTT 600  
 AAGGA 605

(2) INFORMATION FOR SEQ ID NO: 855:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 515 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

	TTGAACAAGC ATTTTAAAT AGTCAACAAC ATCmGCAAT TAGTGAAGAG GCACAACTTT	60
	TAAATAATCC AGATGAATTA ATGGCATTIT TAAAGAATAA GCGTAAAAAT ATTTTAGAAA	120
5	ATGCATACAT TATGCCGCAT AATATGAGAG AAATGTTACG AAGTTATTTG GAAAGTATGT	180
	CTCAAGACTT TAATGTTGGC GGATTTTTTA ATAAAAAGAA GAAAAAATA CAAATTCAAC	240
10	AACAGCGATT ATTAACAGCG ACAGATGCGT TACAAGAACA TGTTAATCAA CAAATTCGTC	300
	AACCAATGCG AGAAGATATG TCATTGTGTA CGCGTTTTAT CAATAAAAAA GmAGCTTCAG	360
	aTAmAGTATT AAATCAGCAT TATGACGTTA AGCCAGAAAT GATTGAAGGT TTATATCAAC	420
15	CACAAACATC AATCAGCAAT ACTTATGTAC TTACATTTTC AGACGAAGTG GTTAAAGCCA	480
	TTAAGAAATA TGTGAACAA CAATCAACAC CAATT	515

## (2) INFORMATION FOR SEQ ID NO: 856:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1607 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

	GTCATTTTTA AAATTTGCA TTCGCGTTTA ATTTTTCTC TTTTTCTTT TTCTTCTAGT	60
30	GACATACTTT CTTAGGTGT TTCAACCAAT TCAGATGTAT CTACATCATC AATTTTAGTG	120
	ATTTTGTCTA CATCTTTCTT TAAATCTTCT GGGACGTTCT CGAAACGCTT ATATTGCTCT	180
35	TTAGAGATAC TAGCAGCTAT TTCATTAGCT CCTAAAATT CATCTATCAA GCCGAAAGAC	240
	AAGGCTTCTT CTGCAGTAAG CCAAGTTTCT GCATCTAACA TCTGTTTTAA GTGTTCTTGA	300
	TCTAAATCTT TTGCTTTATC TAAATAAGCT GAATTACTAA CAGCATCTGT TTTTCAAGT	360
40	AAATCCGCTG TCTTTCTTAA TTCTTCTGCA TTACCTACAG TCATAACCCA TGAATTATGA	420
	ATCATTAAAA AACTATTTTT GTGCATAAAA ATAGTGTAC CACTCATAGC GATAACACTA	480
	GCAATTGATG CCGCTAAGGC ATCGACATAG ATATTAATTT TTGCAGGATG CATTTTATAGC	540
45	ATATTGTATA TTGCATGTCC TTCAAATACA CTGCCTCCAG ATGAATTTAT ATGAACATCT	600
	ATTTCACTGA TGTCTCCTAG TTCATCTAGT TTATTTTGA AATCTGTAGC AGTTACATCA	660
	CTTTCAAACC ATTTATCACT TACAATATCA CCATAAATGa ATATTTCAACC TTTACTTTTT	720
50	GATTTTCTTT TCATTTGAAA ATACTTAGCT TTCATTGACA TTTTATCAC CACCTTTCaA	780
	AGATTTTCTT AATTCAAGTG GCGTGTCAAT TGGGTATAAA TCACCGCTTA ATTAGCGGCT	840

AACCCTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCCTATCA GCCCTTAAAT 960  
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCT GTCTGTTTAA GTAAGTAGTT 1020  
 5 TCCGATTAA<sub>n</sub> TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080  
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCAATT AAGAATATTG 1140  
 AGGGCAATTG AAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCACTATAT 1200  
 10 CTCAGAGAC ATATTTTTTA GGTAAAGGTT CGATTTC AAC ACCAGGCTCT TGGAATAATA 1260  
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320  
 15 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380  
 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440  
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAAATG CAACATGTCC aTATTATGAA 1500  
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGGAATAATA AAGTTCAC<sub>c</sub>G TGATTGGTTT 1560  
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

## (2) INFORMATION FOR SEQ ID NO: 857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60  
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120  
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180  
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACCT GCAGAAAAGC 240  
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGGnATAA CTACAGGATA 300  
 TTACCGGCAT TGGGGGTTTA AAAAATTCCC AGTnAGAGGT ATnCC 346

## (2) INFORMATION FOR SEQ ID NO: 858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAATAATAA TGGACTTTAG 60  
 AATTTAAATT TACAATAAAT AGTTCTATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT 120  
 5 TGAAAATACG AACGAATGAG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG 180  
 GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA 240  
 10 TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA 300  
 TTGAAAGAAA AATATTCACT ATTCGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA 360  
 ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG 420  
 15 ACACCATTAA AGCCAATTGG TGTCGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT 480  
 CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCGAACGA 540  
 GATGTACCAT ATGTATTAGA TACAATTAAA CTTTAAACAG AAGAAAAGTT AAATGTGCCG 600  
 20 CTAATAGGAT TTAGTGGGGC ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA 660  
 TCGAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT 720  
 TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT 780  
 25 GCCGAATTGA TTCAAATTTT CGATTCATGG GTAGGTGCAT TAAATGTCGA GGATTACAGA 840  
 CGTTACATTA AACCACATAT GATTGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG 900  
 CCGSTAATTT TATTCGGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG 960  
 30 ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAATC AGGCTCAACA ATTAGGCGTT 1020  
 ACTAAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT 1080  
 35 GAAGAGAGAT TGAAACCAAT ATTAGATCAA GGTATGGAGA ACGGTAAACA CATCTTTAAT 1140  
 TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA 1176

## (2) INFORMATION FOR SEQ ID NO: 859:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

50 ATTTGGTGCA TTGGTAAAT TGACCTGAAA GAAAAAAGTG GTTTAGTTGC ACATTGAGTG 60  
 NAAGTGCACA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG 120  
 AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TCAATTAAGA 180

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AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300  
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360  
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420  
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480  
 10 GTAATGATAT AACTAAGACT TATACCATT T TGAAAATTG TAAAAGTGAG GTGATGTTAT 540  
 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTGCGTG TTTCTACAGG 600  
 TATTGATAGT ATGTGTTTnn T 621

(2) INFORMATION FOR SEQ ID NO: 860:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60  
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTGTGAGAT ATATTGGAAT 120  
 30 GACTGTCGGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180  
 AACTATAACT ATCATGTTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTCAGCT 240  
 AAAGTATGCC AAATAAACTT AAAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300  
 35 TGCTTTTTGT TTATAGAAAT TTAAAATTCA TGCCTTTATG CTAACAACAA TATTATTTTA 360  
 CTCTCTTACG TTGCCAATG TAACC GTATA GCAAAGTAAA TGACTGCGAT AATGATGACA 420  
 ACATACATAT ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480  
 40 AAGTGCnCT GGTAAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540  
 ACGG 544

(2) INFORMATION FOR SEQ ID NO: 861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

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AATTTAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATT TCATTTATAG 120  
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180  
 5 TGAGGGATTC AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240  
 CGAAGAAACT TTAATTCAnA AnATTAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300  
 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360  
 10 GaAGGTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420  
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480  
 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540  
 15 AATCATTACA CATTTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtTCGA 600  
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTn nAAATGCAAA A 651

(2) INFORMATION FOR SEQ ID NO: 862:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:

TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60  
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAACACT 120  
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180  
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240  
 TATGTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300  
 40 AATAATAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360  
 GaaAAGaGAT ACTGGCaATT TTACTAACCA GtATCTCTTT T 401

(2) INFORMATION FOR SEQ ID NO: 863:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

EP 0 786 519 A2

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120  
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC nGATGCTACT ACTTATCTTA 180  
 5 ACAGTTGATT AAGTAAATCA TTTAACAGCG AGATTATnCA ACCAGGGGGA TGACTIONATG 240  
 AATTTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTCAGCTTT 300  
 AATGCCAC 308  
 10

(2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1827 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60  
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120  
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180  
 TAAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240  
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTTAT CGAGTTTAAA GAAGGAGCCT 300  
 30 TTTATATAAC TTTTAGCAAT GTAAGTGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360  
 TTGTTGGAAA TATTTTGA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420  
 35 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAAACTTCA 480  
 CAAAGCATTAA AAAGATCGTG AAGAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540  
 AGCGAAGTTA CGAGATTGTA ACAAAGAAGT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600  
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660  
 ATTCGGAATG GAATTAAACA ATAAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720  
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780  
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAGC GTTTGATGAA ATACTTGAGG 840  
 GAATGACAAA TGCTATTCAA CATTGAGTTA AAGAAGGTAT TGAACCTGAT GAAGCAGTAG 900  
 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960  
 50 TTACAAGTAA AACTATTATC aAAAAATGCT AGAATGCCCC AACGAAATCA TAAGACGGAT 1020  
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTACTCG AACCACAAGA AAAAGCAGTG 1080  
 55

AGTGGTGTAA GTAGTAAAC GTATTTAGTG ATTGAAACAG GCAAGATAGA CGCGGGATAT 1200  
 CATGGCAATT TAGGGATTAA TATCAAGAAT GATGAAGAAC GTGATGGAAT ACCCTTTTTTA 1260  
 TATGATGATA TAGACGCTGA ATTAGAAGAT GGATTAATAA GCATTTTGA TATAAAAGGT 1320  
 AACTATGTAC AAGATGGAAG AGGCATAAGA AGAGTTTACC AAATCAACAA AGGCGATAAA 1380  
 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC 1440  
 GAAAGTGTTT CAGAACGTGG AGCAAAAGGC TTCGGAAGTA GCGGAGTGTA AAGACATCTT 1500  
 AGATCGAGTT AAGGAGGTTT TGGGGAAGTG ACGCAATACT TAGTCACAAC ATTCAAAGAT 1560  
 TCAACAGGAC GACCACATGA ACATATTACT GTGGCTAGAG ATAATCAGAC GTTTACAGTT 1620  
 ATTGAGGCAG AGAGTAAAGA AGAAGCTGAG CGCAAATACG AGGCACAAGT TAAGATAAGG 1680  
 AGAGATGGAG ATGCCAAAGA AAACGGTAAC GATTGATGTA GATGAAACT TATTAGTAGT 1740  
 AGCTAGTAAT GAAATATCAG AACTATTATA TGAATATGAC AGTGAGTtAA TGTCAGCTGG 1800  
 ATGGAAGATG GCGATAATAG GGATATC 1827

## (2) INFORMATION FOR SEQ ID NO: 865:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

TCAATTGCAT CATCATATGA AATTCTaGGG AATGGTGTCTG CAACTTTTTC AAGTTTTGAT 60  
 GTATCACGCT CTAAAATTTT CAACTCTAGT TTACAATTTT CTAAAACCTGA TTTTACAACA 120  
 TGTGTTACAT ATTGTTCTTG AATTTCTAAA CTTTCAGCAT GATTTGTGAA AGCCATTTCT 180  
 CCTTCAATCA TCCAGAACTC GATCAAGTGT CTACGTGTTT yTGATTTTTC AGCTCTGAAA 240  
 GTTGGACCAA ATGAAAATAC TTTTCCGTGT GCCATTGCTG CAGCTTCTAA GTATAACTGA 300  
 CCACTTTGAG ATAAAAACGC ATCTTGATCA AAGTATTTAG TATGGAATAA TTCACTTGTA 360  
 CCTTCTGGCG CACTTGCTGT CAAAATTGGT GGATCAACCT TTGTAAATCC ATCTTTGTTG 420  
 AAAAATTCAT ACGTTGCACG AATAACTTCA TTTCTAATTT TCATTACAGC ATGTTGTTTT 480  
 TTAGAACGTA ACCATAAATG ACGGTGATCC ATTAAGAATT CTGTACCATG ATTTTTAGGT 540  
 GTAATCGGAT AGTCATGCGC TTCTGAAATA ACTTCAATTG ATTTCACTTG CATTTTCGTAT 600  
 CCTAAGTCAG AACGATTATC TTCTGTAATT GTGCCTGTAA CGTATAGAGA TGATTCTTGA 660

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	TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAACGTTTA	780
	TTTGTTAACC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC	840
5	GTTGTTTTCA TAACCATTCT CCTATTTATT TTTTCGkTAT ACAATACTCA TTCATTTTAA	900
	CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAAATGATT	960
10	TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA	1020
	ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG	1080
	TTTAATTATA AAACTCAAAT TTTGACGACC AAACAAAAAT TCTTGTAACA GAACATAGCA	1140
15	CATGTCATGT CACAAGAATT TTACTTTGTA TTTCACTTTT TCTTTTTTTG AATTTGTCTT	1200
	AATAATTTTC CAAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTGTTGT	1260
	TCAAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG	1320
20	CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT	1379

(2) INFORMATION FOR SEQ ID NO: 866:

	(i) SEQUENCE CHARACTERISTICS:
25	(A) LENGTH: 450 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

	TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT	60
35	GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTGT	120
	CTTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT	180
	TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAAC ATCTAGCATT GTAATTGAAT	240
40	GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG	300
	CAATTCGCTT ACTTGACCA GGTGGATGCG CTTTTAAAAA AGTTTGAACA AGAACATCTG	360
45	aACCATAATC TACTTTAtCt TTCGAAAACA CTCctTATCA GTTATTAAAT CAATTTTATG	420
	AnGGTThTAA TTGGATATTG AGTACGTTGT	450

(2) INFORMATION FOR SEQ ID NO: 867:

	(i) SEQUENCE CHARACTERISTICS:
50	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5	AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT	60
	CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA	120
	ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTTAATAGTT	180
10	TTAACTTTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA	240
	TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA	300
	TATCAGGCCA TATAGCTACC TGTACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA	360
15	CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG	400

## (2) INFORMATION FOR SEQ ID NO: 868:

## (i) SEQUENCE CHARACTERISTICS:

20	(A) LENGTH: 1132 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

	AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA	60
30	AAAATAACnT CTTATGATAA AAATGAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC	120
	AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA	180
	AATATACATT TAAACCTAAA GATTTCAAAG CGTTCACGT AGAAGGCTTA GACGCACGAA	240
35	TGGAAGCTTT AAACGAATAC ATACGaCCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG	300
	ACTTCTTTAC AAGTCAAAC TGTGAAACAT TTTATCCTCA CGTAGCAAAG CATGCTAGAA	360
	GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA	420
40	AAATGTTACC TCATTTCCAA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGGAA	480
	TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTTGAAAGA AAATTTAAAG	540
45	CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC	600
	CATTTATTAA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG	660
	TGAAAAAAGG TGAATTCITT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA	720
50	GTGACAAAGC ATTTATTGCA TTTTATAAG AAACCTTCGA TCAGTTCTTA CCATTTTATT	780
	CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC	840
55	TTtTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA	900

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020  
 TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTT 1080  
 5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

## (2) INFORMATION FOR SEQ ID NO: 869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGACTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60  
 20 ATCAAATATT ATATTTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120  
 AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCTTCTGGT AAGATCGCTT CATCAACACC 180  
 CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGTAATT GTTGCGCACT 240  
 25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300  
 CTTATACTGT TGTGAGTAG TACTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360  
 30 ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGGAAAAG nCGTTTGATA AAAGGGCT 418

## (2) INFORMATION FOR SEQ ID NO: 870:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60  
 GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120  
 45 GATTGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180  
 AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTAAAAGC TTATGAAGAA 240  
 50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300  
 GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCTTAGT GAGATATAAA 360  
 AAAATAGATA CATTATTGAC GGAAAATGAA TCTAAAAATC TGGTTTTCTT TTCAAGGCAA 420

TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540  
 GATATAGATA CTTCATTAAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

(2) INFORMATION FOR SEQ ID NO: 871:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCTACACCAA 60  
 TAAACGATGC AAACACAGTn TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120  
 TTGAATAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTTAACAAT KCGGCGATTT 180  
 GTTTTGCTTT TTTAACGCCT TCTTGTCTT TAAATCCACC CGAGATTCT ACGCTATCAG 240  
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGTGCTT 300  
 CTTTTTTATA GCTGTACCT TTTTTGAAAT CTAACCAAAC AACCATGACA TTATCAGTT 360  
 TCTTAGAGAT TTCTCCGTT ACTTTTTTAA ATTGTTTTT GTCTTTTACT TTAAAAGTAA 420  
 CTGTAGGcTG GTTGTGTTCC tGtTTAAATT CTGtTTGGC AGATCCCTGT TTaATATCAG 480  
 AACCGCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540  
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTACTCTA ATTCTATTAG 600  
 GTTCTTCAAC TTGAATTTTA GGTTCCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660  
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720  
 CTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780  
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840  
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900  
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960  
 ATTAACATAC T 971

(2) INFORMATION FOR SEQ ID NO: 872:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 636 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

CTGGTTAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGTCTTGG 60  
 5 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120  
 ATGCCGTTAT GACCTTGTG AAGTATTTGA TTAATACGAT CTTTAAGTGC TTGTTTTTCC 180  
 10 TTATCTGTTA GATTTGGATT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240  
 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCA TGGCATGCAC TTGTTCAATC 300  
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360  
 15 TTGTTGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTTGTCTTGA 420  
 TCCGTCGCAT TTGAAGCTTC GATTTCTTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480  
 TGAATTGCCT TGTCTTTAGC ATCTTGTAAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540  
 20 TCATTGACTg CTTGGATTGC GCCATTGATA TCATTCACAT tTGTGTaTCA CTATTTAGCA 600  
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

## (2) INFORMATION FOR SEQ ID NO: 873:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

35 CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTTAG 60  
 AACTCAATCC GTAAAAATTG TCAACTTTCT TTTTAATATT ATCGTAATCA ATGGTTACAT 120  
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTTAAAGCCC GCTATACTGA 180  
 40 AAAAGCCTTC AATCGGCTGA TCAATCATTT CAATATATTT TAAAGCTGTG ATTGAACCTA 240  
 AACCATGTGT TACAAAATAT GTATCCTTTT TGGTACATT AATTTGTTTC GTCATAGCTT 300  
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360  
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420  
 GCATAGAATG TACAATAtTA CATCTGTCAT CTCATTCTCT CCTTTCAACT TACTACTTCT 480  
 TTTCTATTTT TAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAAC ACCTTAATTA 540  
 50 GAAATGTTAT ATCGCAAAGT GACATTTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600  
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTTCA CAAAAATAAT TCCCGCTGA 659

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

AAAATAAAAT CCATTTTAGT ATTCGTAGAA AATGAGAGCC CCCTTTACCA CAATATGTAA 60  
 ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTGAG 120  
 TTGATAATGC AGTGCGTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA 180  
 TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCTTAAAC GCAGATTAAT 240  
 GGTGATGATG TGTTAATGCG TTTTGGTTTT TAGAGCCACG TAATTCCCA GGACATATAG 300  
 GAGGAACCAT TCCAC 315

## (2) INFORMATION FOR SEQ ID NO: 875:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

TACACGACCT TGTAAGTCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT 60  
 ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTTAATATAT GTCTGATACG 120  
 TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC 180  
 GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT 240  
 ATCTTCACGA CTCTTATTTT CCATTaWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA 300  
 ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT 360  
 CTCCAACACC TTGTGGAAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC 420  
 ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC 480  
 GT 482

## (2) INFORMATION FOR SEQ ID NO: 876:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60  
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTT ATTACTAATT 120  
 10 ATCCAATAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAAACTGTAT 180  
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGGA TCTGAACGTG 240  
 TGGATGACTT AGAATTGTGA GAACAACGCG TTAAAGAACA TGGATTAGAC GAAGAAGCAT 300  
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC ACACTGTGGA TTTGGTTTAG 360  
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420  
 TCCCAAGATT ATTAAACCGT TTATATCCAT AAGTTTTAGG GTCGTTACTT AAAATATATA 480  
 20 TTATGATAAT AAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGGA 540  
 AATGAAGATT GATAACGCT TATATTAATC ATGAACAAAC TTTTGTTTAG TAACTATATT 600  
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTAAAAATC TAGTGTTAAA 660  
 25 AAATACTGTT 670

## (2) INFORMATION FOR SEQ ID NO: 877:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60  
 40 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120  
 GATGATTnTC TTGTTTTCAA CCTTATACAC AATATTTTTG AnATTTATAT TATATTCATA 180  
 45 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACCTA 240  
 TACTATATTT ATCaCaCAA CAGTTTTTCC TTTCATTTTC AACATAACA GAAAAAGCCT 300  
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAA GATATAACA GGTTAATCAT 360  
 50 TCAAAGCTAA CATCACATTT ATTCACGTGA ATTTTTCATA AAGAATAATA ATGACTGTAA 420  
 TTCTATACCT AAGTCAATTT GATGTACTTG CACATCTGAA GGCCTATTAA TTCTACCAGG 480  
 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGGACGAGT TCATCTGCAA CTTTCTGTGC 540

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660  
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720  
 5 AGCTTTCCCT AGGTTCCCAA CTCCGACAAT TCGGATTTTG ATCATGTCAC TCTCGCTTAG 780  
 TTCAGATTTA AAGAAATCCA ATAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840  
 10 TTCGCCAAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900  
 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960  
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGGTCAC TCATTGCTA 1020  
 15 TTTCTCTCTT CGTGTTTGAA TGAATTATAT CTATGTATTC AAACGAGTTA GAGCGTAATT 1080  
 GTTAGATTAT TAAAArACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTaWT 1140  
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200  
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATT GAGAAGACGA AGGTGAAG 1258

## (2) INFORMATION FOR SEQ ID NO: 878:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAAA TAACTTTGGA AAGGATGTTG 60  
 35 TTTGTnATTC CCATGGACAC ATGCCATCTn ATTTAAGTTT TATACTCTAT TTTTCTGATG 120  
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTTGTTCAAG CTCATATTCT TTATCTACTT 180  
 GCTTACCGTT TTCryTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTTTTTCAG 240  
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300  
 CATCATCATA AAAAGATGAT CCTTTTTTTA TATATGATGA TACAAAATCA AAATCCGACT 360  
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTTGTTCT 420  
 45 TCAAGCTGTT TTCTTCTTTT TCTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480  
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTCGTCTGT 540  
 50 GATGTA 546

## (2) INFORMATION FOR SEQ ID NO: 879:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

	TTTATGAATT TTTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCctAC TAtktCTkTT	60
10	ATATATCCTT CTTCTCCTTC TTTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA	120
	ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAAA ATTCTCTATT AAAATAACCC	180
	CATTTCccAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT	240
15	ATCGTTTTTA GTaGCATATT ATTTGAATGC CCCAAATTAT CkATCACKTc AATTCTGACA	300
	TCATTTATAG AATTAACGTC ATATTTTAAT AAGTAATCTC CTATTTcAGT GATGTAATCA	360
	ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT	420
20	ATATTGACGT CGAGCATATC ATCTAACAAG AGTATCATAT TACTTAGTTC TAAAAATCTT	480
	GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTCG ATAGTTTTTT TAGCAATAAA	540
	GTATCTAATA CTTCTATTTT ATTCAAGTCT TTTAAAGTTA CTATTCTAGG AAATTCACTA	600
25	ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT	660
	ATGaATTGCT GcTTTCTATT CGGtACACGC AATGaAATAC TTGTACCACA AGTCCATTGt	720
30	TTTTCCaAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGAcT GGaTATATAA GATTCTGAAG	780
	GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTTGTT	840
	GAAAAAAATT AACATTTTtA nTAACTAnGG	870

35 (2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

45

	GGTTTACATC TTTATCAACT GTAATTTTCAT TGACATCTTC ATTCATATTT AAAACACCAT	60
	TAAATGTCCC TGAATATTCA CTTGTTTGTT TAACTGTGGC AGTGACTTGT CGTTACCATA	120
50	TGTCATCATA TATTGTGCAA ATGTTAAAGT CCCCATTGAG TTGACCGACA AAGTTGAATT	180
	TATCGAATTG TATTcAGATT GTAAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC	240
	CAAATAGnCC TTGTCTGTtA TTTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT	300

55

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

AAGATATTGC	GAAAAGAAGT	GACAGTAACA	GAGGAATTTC	AAAATTTATT	CAACCATATA	60
TTGAAAATTG	ATGAAATGGT	GCATGCAAAT	GAAGCGCGTA	TTGCGTATGA	AGCAGACATG	120
CGAAAACCTT	TATATAGTAA	ACGCATTTAT	CAAAATTTAA	CATTAGACTC	TATTGTTTTT	180
AGAAATACAT	TGAGATATAC	AGCGATTATG	ATGATAGCGG	ATATTTATTG	CGTTAATGTT	240
TGATTTTGAA	AAAGCATCCT	GGATCCCGTT	ATCTGCACAT	CCAnTATTCC	TAGGGCCATC	300
AnCCTATACC	ATGCCATCCG	AGAGAGGTAT	GGn			333

(2) INFORMATION FOR SEQ ID NO: 882:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 617 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

ATTGAAAGAA	AACTGACGT	ACTTATCCGA	TGATAAAATG	AAAGAAGTAG	ATAATGCACT	60
AATGATTAGT	TTAGGGCTGA	ATGCAGTAGC	TCACCAGAAA	AATTAGGCGT	CTATTATATG	120
TATTTTTTCAG	AGATAAATAA	AATATTGATA	TAAAAGACAA	TAACTTTATA	ATAATTATAA	180
CTATTTCTAA	ATTCTGTACG	AAGAATTTTC	TTATAAACAA	AGATTTTAGC	AAATACCACT	240
TATGATATTC	ATATTTTTTA	TTATAAAGG	ATGTCCTAAG	TTTTTTAGGC	TTTAGGTATT	300
CCATCCTAAA	GTTTTTTTAG	CTTAAAAGTA	TCATCTACAG	CAAAATTGCA	AACGACAAAA	360
TTGATAAGTG	CAATTAAATA	AATGTTAGTA	AGTGAATCAT	AATTATCCTT	GCTTAAGCAT	420
TTGCTTTGTA	AGGGAAGTGA	GGAGGCAACT	AATCGTGGAA	GAATTTAAGC	AACATTATAA	480
GGGTTTAATT	GATGAAAGTT	TAACGTGCCA	AGATAAAGTA	GAATTGATAA	AAAAGTGTGA	540
GAAATACACT	GACGAAGTGA	TTCGTAAGGA	CGTCTTGCTT	GAAGACATTG	TCGATATTCA	600

## (2) INFORMATION FOR SEQ ID NO: 883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

GTTGTATTAA AATTTTTCAA TTAAACAACG AAACAATACG AAGAAAAACA TATTACTGAG 60  
 CCACTGGAAT TGACGAGCTT ATTAGGTANT ATTTCTCGTC TAGACAATGG TCATTTTGCA 120  
 CATTTCATG CTACTTTCGG TACTCAATCA TATGAACTT TTAGCGGACA TCTCGCTAAA 180  
 GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTGGGA CATTCAACGT 240  
 TCATTCAAAG ATGCAGTCGG TTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTTAG 300  
 TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA 360  
 TTAATATACT TCAACGAGTT AAATTAAATT TTTAATTAGG AATTGAATGC GTTTATAACT 420  
 ATCACATTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TkTATTATTG aTGCAATCTC 480  
 GaTACATCGC TAGAATTTAC TTTTaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT 540  
 TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT 583

## (2) INFORMATION FOR SEQ ID NO: 884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCACTCAA ACTCACAAAA 60  
 GcTAACGCat GwyTGCTyCA TTCGTGCGAT ACACTTTTGA TACATCTACA CCAATACTTG 120  
 ATATCGTTTC AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATATACG 180  
 CTGTGTGTCC tAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTTGCT 240  
 TCGTAAATGT TTGAACATCT TTAAATTCG CATTGTGAAC ATTTGGAATA AAATCAATTA 300  
 ACGCTTCTCC TATTGAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT 360  
 AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT 420

TGTATCAACA AAAATTTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

## (2) INFORMATION FOR SEQ ID NO: 885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

15	TTAATGATTT CTTCGTATGA TTCACCAACA ATTTGCGCTA AAATATCATG CGCAAGTACT	60
	TCACCTTCAA CCATAAATTC TATTTGCTCT ACTAAAAATT TTACGTCATT CATGCTATTC	120
	ATTTTGGAA TTAACAAAGC ATATAAGTTT GTAAATTCTT TTAAATACGC AGCATCAGCT	180
20	TTTAAGTAAT GGCCTAATGC GTCACCTCCTA TATCTCCGGA TAACATCTTC TGAATAAAGT	240
	CATCCTCATA AATATCATAA TGATGGCTTG CAGCTGGGTA CAATTTTGTG AAATTCCATG	300
	TAAAAATCCT CCCTAAATAA AAAACTACTT CCAACATGAA GAGTTGAGGC ATGTGCAAAC	360
25	TAGCCCATCA CTCATAACAC TTCCACGTGG GACTACCAAC	400

## (2) INFORMATION FOR SEQ ID NO: 886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 857 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

	AAGAATTTAA ACAAATGAT ATTTGGAAAC ATTTTAAAGC TGTGAAAAAT AATCATGTTT	60
40	ATGACTTAGA GGAAGTGCCA TTCGGTATTA CAGCAAATGT TGATGCTGAT AAGGCAATGA	120
	CTCAATTATA TGATTTATTT TATAAGGATA AAAAATAGTG AGTTGATATG ATGATAAAAA	180
	ATAAAAAGAA ACTACTATTT TTATGTTTGT TAGTCATTTT AATCGCAACT GCTTATATTT	240
45	CGTTTGTAAC CGGTACAATT AAATTGTCAT TTAATGACCT ATTTACAAAA TTTACAACCTG	300
	GTAGCAATGA AGCAGTGGAT TCAATCATTG ATTTGCGATT GCCACGTATA TTAATTGCAT	360
50	TGATGGTTGG CGCAATGTTA GCAGTTTCTG GAGCATTAT ACAAGCAGCA CTACAAAATC	420
	CTTTGGCAGG GCGAATATCA TTGGCGTTTC CTCAGGTGCA CTTATAATGA GAGCCTTTGT	480
	ATGTTGTTTA TTCCACAATT GTACTTTTAC TTACCATTAT TAAGTTTAT TGGAGGTTTA	540



EP 0 786 519 A2

ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660  
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720  
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780  
 TTAATAAATT TAGACGACAT ACAAGCGCGA ATATCGGTTT TAATATTGAT CGTTACAGAT 840  
 GGTTAACAGG GTTATTA 857

(2) INFORMATION FOR SEQ ID NO: 887:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 675 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60  
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120  
 25 CATTTCATCA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180  
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240  
 TTGAAAATGA GGCACCTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300  
 30 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAAC GCAATGTAGT TATGGTGGTG 360  
 TTACTTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTTATGGA 420  
 35 TTGACGGACA TCAAACAGAA ATAGAACTAA CTGCAGTAAA AACGAAAAAG AAAATTGTTA 480  
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540  
 AACAAAGGTGG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600  
 40 TAGAATATGA TTTTATAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660  
 CnGATAATna AACna 675

(2) INFORMATION FOR SEQ ID NO: 888:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 851 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTGG ATGTTTTTCAT 120  
 GATATTTAGG TTTTCTCTTT TCAAGATAAA CCATTAAAGTy CTCAATAGAA GGTGTAGTGA 180  
 5 TATTCACTTT AKGACCTAAA ATTTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA 240  
 ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT 300  
 10 CAATAGCACC ACTCACAAC T GATATCTTT GTAACAGTTG TTCTTTTGAA CCATTTAAGA 360  
 TAACTTCACC GTCACCTAAG TGAATGATAT AATCAGCTAT TTTTCTAAA TCTGAGATAA 420  
 TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA 480  
 15 ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT 540  
 CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTTTCAT TTTCATCCCA GTCGAAAATG 600  
 TTTTATTGA TTTATTGATT GGTAAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT 660  
 20 GGTCCCATTT ACGATAAAAA GGGGCAATCA TTTTTCAGG TTGCTTCGTA GTCCATCTCT 720  
 CATTAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA 780  
 GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA 840  
 25 TTAACCTAAT n 851

## (2) INFORMATION FOR SEQ ID NO: 889:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT 60  
 40 TTGTCAATCG TGCGTGTTCG TGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC 120  
 CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC 180  
 GCTTGTGAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT 240  
 45 AGTCATATCA AAAAATGATT TATATTCGCC TGAATCAnCT AGATAAAATT GGTGCTGCTAC 300  
 ATGGTCAGGG TGCTGGCTCA CCGTGCTCA AACGnGnTA ATACTGCCCA GTACCTTTGC 360  
 50 TC 362

## (2) INFORMATION FOR SEQ ID NO: 890:

55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

	TTGGTTTATT CCCAAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTGAAA GTTTAAATAT	60
10	TGTCAAACCC GCTAAAAATA ATACTTCTG GCCTGTTGCA GGATTGCGAG TGTATTAAAC	120
	AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT	180
	ATTAAACATGC TGTATGATAC TTCTAGGTGT TTTCGCATTG TTTATATATA TAAATACAAA	240
15	ATTGAAGTTA CATATTTTGT ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC	300
	TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC	360
	AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAAT ATAATAGAAT TTCTTGCTTT	420
20	AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAT	480
	TCATGTTATT TTAAAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC	540
	TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAcAGGGA	600
25	AATAAAACAG CCAAAGTTAT AAAAAGTGAA TTAATAACTA ATTATATTAT GTTAGCCACG	660
	CTTCAAATAA AAnATAATTA GAATAAGGTG GGATTGATAA TCAAnGCTAn GCGAATCTAA	720
30	AATCATCAAT AAAAACCCCA AATATAG	747

(2) INFORMATION FOR SEQ ID NO: 891:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 526 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

	ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT	60
45	ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT	120
	TAGCGGAAAT TAGAAAAAAG CATTTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA	180
	GACCGGGATA CTTTGAAAAA GCAGTTGTGA ATGAtGTGGA TGCATATGTT TTAAAAGAAC	240
50	GTTCTATAGA AGAATTGGTG GAAACCATTA ATAAAGTAAA TAACGGAGAG AAAGAATATA	300
	GCGCCACATT GATGACTTCA TTTTGTGTAG ATAAAAACCC ATTAACGCC AAAGAACAAA	360
55	TTGTATTAAG GGAAATTGGC AaTGGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT	420

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

## (2) INFORMATION FOR SEQ ID NO: 892:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 751 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

TATTTGATGT AAAAGCGAAN GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC 60  
 CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG 120  
 ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA 180  
 ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG 240  
 GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA 300  
 AGCATATCGT CTCTCAATTT GGATTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG 360  
 AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA 420  
 TATCAAGTTT AACCGGAATA TTATTATTG TAACATCATT TTAGGTATT ACATTCTTGA 480  
 TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACCGAAGAT GAGTTAGAGA 540  
 ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GGAATAAAGT 600  
 TTAAATTTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA 660  
 CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA 720  
 TGGGATTATA CATTTGTATG TATGCTGTTT T 751

## (2) INFORMATION FOR SEQ ID NO: 893:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 357 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTTGA GCTATTTAAA 60  
 ATCAACAGTA GATGTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC 120  
 AACATCATCA CTAGCGCCAT TCTTATTTGG TGACTTAGAA GCAGATACTG AAACAATTGG 180

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300  
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

(2) INFORMATION FOR SEQ ID NO: 894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTTC 60  
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120  
 TTAAGTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180  
 ATGAGCGCTA CGACTTCTTT AGTTTTTCATT GCGACTATCC TTTCAGTTAT GTTTGGTCTG 240  
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTGTTTTGA ATACTTCTTA TTTTATTACT 300  
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTTCA TCGTTTTTAA TTACTTTAAA 360  
 AATTGTATAA CTkAAATATT TAAAATGATA TAAwCACTAA GATTGaTAAT AtTTAATThT 420  
 TTGGAAAATT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

(2) INFORMATION FOR SEQ ID NO: 895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60  
 AAGCAACAAG TCGTAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120  
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180  
 TCGTTCAAaA TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATCA 240  
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300  
 TGCTTAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360  
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAGT TAAGAAAAAA GCTAGTGTAC 540  
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAT GATGTTATCA AGTGCAAAC 599

(2) INFORMATION FOR SEQ ID NO: 896:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1057 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60  
 TTGTTACACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120  
 TAATAAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180  
 ATAAGTAGCA AACTAAAGCT TTGATTAATT CCAGTAGTAA TTGAATAAAG CCCAATTACT 240  
 ACAATGGCTA GTATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300  
 TCTATATGGC GTTCACCTTC ATCCAATATT TCCAATCGCT TTTCAGTGTA ATTCTTATCT 360  
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420  
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTTGCTGC AGCGTGCCCT 480  
 ACCACAAAAA TAAGCAATAC TAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540  
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600  
 TCTTTATCTA CAAGTTGCTT AACTTCAAT GCACGTCTTT GATTCATCAA AACAAATGGCT 660  
 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720  
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAATTTAC CTAAAATTCC ACCTATGATA 780  
 CCCCTACAA GTCCACCCAG TAAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840  
 CCTCCTCAAT AATAAAAACA GTTCCACCG TTTCATTGAA AATGCGAGCA ATTTTATTG 900  
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960  
 CGCCCGCTTG TTTAGCAAGT TCGGTTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020  
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

(2) INFORMATION FOR SEQ ID NO: 897:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

5 AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA 60  
 TTTCAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT 120  
 GAnCTGCATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTAA 180  
 10 AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG 240  
 AATGGTACGA AAAAATTTGT AAAGTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA 300  
 GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC 336

## (2) INFORMATION FOR SEQ ID NO: 898:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

25 TGnTGnTTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC 60  
 AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT 120  
 30 CATATTTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTTACTTTA TTTTATTCTT 180  
 ATGTTTAATA GCTGCAGTAA ATTTCTGATT AGCAGGTATA CGACACACGG CAATTTATAA 240  
 TAAAACATCT AAAGTGACAC AAAGTATAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG 300  
 35 GG 302

## (2) INFORMATION FOR SEQ ID NO: 899:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

45 CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTTGGT 60  
 50 CAATATGCGA TGTTATTCTT AGCGCCGACT GGACTTGTTA TGGCCACACT ACAAATGTTA 120  
 AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT 180

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TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TG TAGAAATA CTAAACTAAG 300  
 CGAGGTGCAT TATTATTTTT GATTAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360  
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTAAAAA TTTGTTTTTA ATGTAATGTT 420  
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

(2) INFORMATION FOR SEQ ID NO: 900:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

CTTTATTGGT AACTCTCTAT aATATtTTaA CATTTTTACG CTATCGTGCA AACGCAAcCa 60  
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120  
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCCTTACC ATTTAAATCT AATTCCGTAT 180  
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTTCTT AGTTAAATGA GACTGTTTTG 240  
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300  
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGGCGA AGAAGGAATT GGCACAATAT 360  
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420  
 CTTTCAAAAA TTTATACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480  
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540  
 35 CTTTCATCTTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600  
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660  
 40 TATAAATGGT TATATTTTCA TATAACTTAG CACCACAACT CAAACAATTA TTCATCAATC 720  
 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780  
 TTCATACTTA CCCCTTnCAT GAAAAAACAA TACTTTTTCC A 821

(2) INFORMATION FOR SEQ ID NO: 901:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



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TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60  
 TAACTAAAAA TCCTAATATT GAAAAACAA AGCCATTTAA AACATAACCT AGTATATTCC 120  
 5 ATGTATGATT GTAACCTCATT TGCCAGTTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180  
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCCTG ATGCGTGAAC AATTCAGCAA 240  
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300  
 10 CTCGACGnCA TCAATGTTAA TCCGGACCTT ACTAATGCAT ACCTATAAG 349

(2) INFORMATION FOR SEQ ID NO: 902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTCGC 60  
 25 TAAAATCGAC GCGGTTGTTA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120  
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGT 180  
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240  
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300  
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360  
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

(2) INFORMATION FOR SEQ ID NO: 903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60  
 TTGGTTAAAA CAAAATATCA TCAGTTATTT GGACGATGTT AGTTTACGA GATTAGATTT 120  
 50 GGCTTTTGAT TTTGAATTTG ATTTAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180  
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGnCGAATA 240

GATTCACATT CTATGCGGTG GAATTGATTA AACG

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## (2) INFORMATION FOR SEQ ID NO: 904:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG	ACACTGTTTC	AAATGAAACA	ACAGTGTGTA	TTTtagAGGC	AATGAAACTA	60
TTTAATGAAA	TTCAAGCAGA	AATTCAGGT	GAAATTGTTG	AAATCTTAGT	AGAAGACGGA	120
CAAATGGTAG	AGTATGGCCA	ACCGTTATTT	AAGGTGAAAT	AATGAAAAAG	GTTTAATTGC	180
AAACCGCGGT	GANTCGCAGT	TAGGATTATT	CGCGCTTGTC	GTGATTTAGG	CATCCAAACT	240
GTTGCATCTT	TCTGAGGGGA	TAAAGATCGC	TACATCTCAA	ATGCTGATGA	GGCATATnCG	300
TGGGCCnCTT	GTCTAAGGTC	ATATTTAATA	TCGG			334

## (2) INFORMATION FOR SEQ ID NO: 905:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT	AATTCTTaAC	CGTCAATTGA	CCTTTATGCA	GATTTAATAT	TCCTAAAACG	60
TATAACTCTT	CTAATGATAA	TTGACACATA	TTTAAATAAC	ACTTTAGATT	CCGCAATAAT	120
TCTTGTGACG	ACAATAAATA	CGATACATAG	TCACAACTAA	AATCAAATGT	ATATTGACCA	180
AAATAACGTT	CAATATAGTC	ACTAAGCTCA	TTATTCATAT	ATTCTATTTn	ATCTATATGC	240
ATTTTATTAA	TCGAAATAGT	CAATTTACGT	TGATCCCTTT	GATCTCTTCC	TTTCAATAGC	300
CATTGATGAT	TGTnTAAATA	ACTTAACATT	TGAAGAAGGG	CCATCTTAGA	TTGGATTCT	360
TTCATTTnTTA	ATAAACTATC	TATTGAAGCG	CTATTGGAA			399

## (2) INFORMATION FOR SEQ ID NO: 906:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1478 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5	TACATTTTTC AATTTATGGC AAAATnCACa ATTTTCATCG AAATATTTTG TanAnaATCA	60
	TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAACGAT ATCTAAGTTT AAATATTAGA	120
	TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTCTAA GCAAAAGTTA	180
10	AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTTT AATGTTTAAA	240
	AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA	300
	ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaAC AAATGCTaTG AACAAAATGA	360
15	CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA	420
	AAATATTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTTGC	480
	GTTCAAATCT TAATTGTTTCG AAaCGtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA	540
20	TTTAAAAGTA AATAAGTTTA CGGAAtATCT TGTCCGaTAA TAGCGGTGTA AAtGTCAAAC	600
	CACGACTGAT CATctAAATT AAGTkGTAGC CctTCGATTG CTtGATCAAT ACGCTTTAAC	660
	TGACTTGTTTC CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT	720
25	CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACtT TCATAATACG	780
	TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT	840
	GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTA AAC TATCAACGTG	900
30	ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG	960
	ATTTAACAAT TGGTATTGTG AATGATTAAA ATTTCGACACC CCGAATGACT TCAACTTACC	1020
35	TTGTTTAAACA AGTTTAGTTA ATGCATCAGC AACTTGTTCT GGaTCCATCA ATGGTGaAgG	1080
	ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAATG ACTGTTCAAC	1140
	AGATTTACAG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG	1200
40	CTTAGAAGGC AAAATGATAC CACATTTTCGT AACAAATTGA ATTTTATTTT TTAATTCGGG	1260
	TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC	1320
	ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCATTT ATAAAATAAT TTAACtCTTT	1380
45	CGCAGTCATC TTCCATTATC TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC	1440
	ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC	1478

(2) INFORMATION FOR SEQ ID NO: 907:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

	TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA	60
10	AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG	120
	CTTAAGAATG AaATTATACG AAAGTATGAT TTAAAACCCCT CAATTATCTC AAATTCGATA	180
	AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA	240
15	GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAAAA TGGAACATGA TGTTTTAAAG	300
	CAAATTTTAA AGTTGATTTA GAAACTGAAC TTTTAAAGA TACATTACTT GAAGATTCTA	360
	ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT	420
20	AAATTTATTT AATTTCAATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA	480
	GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTTACAC ATACATGAAC	540
25	TAT	543

(2) INFORMATION FOR SEQ ID NO: 908:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 751 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

	TTTnCGGTnG AACATGATtn CGATATTACT TCTAAAACGA TTCAACCAA ACCAGGAGAA	60
	AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA	120
40	GATCCAGAAG TTGCAAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAAACTT	180
	GGTTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTG	240
	AAGCAATTAG ATGAGAACTT TGGTGTATT GAACAACCAA CTTTAAATT CGAATTGTTC	300
45	TATTTTGACA TATTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA	360
	GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT	420
	TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA	480
50	AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA	540
	GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTTGT TAACATTATT AGTGTTACCC	600

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TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATTG TATGCAAAAT 720  
 GAAACACCTC ATAAATATAT TTAAAGGATT A 751

(2) INFORMATION FOR SEQ ID NO: 909:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 394 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCAGTCT AATTTAAAAG GAAGTTAATT ACAAAATTAA AAAATCATGC 60  
 ATCGTGTTCAT TTAGATATTG AAAAAGATGA GTCAAATTTG TTTCATATAT TTCCAATAA 120  
 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180  
 ATAATATGAT TAAAAATGAT GAATGGCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240  
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300  
 AACTCTATAT AGAATGTTTCG TTTTATTTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360  
 TTAAATATGG nATTCCGGTC GGCACACGGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1022 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60  
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120  
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180  
 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240  
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300  
 TGACGATTTT CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360  
 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGkAaTT TAATGTGcGk ATATCTATAG 420  
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAAC 480

GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600  
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660  
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TCGACAATT TGTATTAAAG 720  
 GACGTAGAAA ATTATCGATT ATACTTTTGT TTATCGCGAT AATTGTAAGT TTGATGGCTC 780  
 10 TTAATTTAAT TGCAATTGTC TTATGGGTGA TCGTGATGAT TATGTTGATT TCTAAAAAAG 840  
 AATCAAAAGA AACACACAT AAGGACGATG AGTATATTTA TCATTAATAT GTTCATAGCA 900  
 AAAGAAAAAC CATTAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960  
 15 TTTTATTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAATA 1020  
 CT 1022

## (2) INFORMATION FOR SEQ ID NO: 911:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

GGTACTTTAT TTTTATTTT GGTCTTAGTG ATTTTACAT TATTTACATA TAAAGCGCCT 60  
 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120  
 AGCATTTAAT AAATATGThG GTGGCGAGTA TTCGGTATTA AATTTTATA AGAGCTAGGA 180  
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATT GCTATCGGTG 240  
 TGTCAACAGT ATATGCATTA GTTATAGCAG CCGC 274

## (2) INFORMATION FOR SEQ ID NO: 912:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 679 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

CTTAAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60  
 GATAAATCTA GTTCCTCATT TTCCTTTTGA TACTGTCTTC TTTATCGGC ATTTTCTCTT 120  
 TCTATAATAA ATTGTTGTAA TTTTAAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

TTGTTGTAAT TAACATATAT TTAAGTTAGTT ATGCACCATT TATTCGCGAT TTCACAAATC 300  
 CACCTATAAT ACAAACTATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360  
 5 TGTTCGAC ACTTTAATGT GCCTACTATC CAAAAAGTT ACTCATAACA AATTGCGCAT 420  
 TTTAATAAAT GTAGCAATGC CATTGTCATG CTGCAAAAAT ACTCGTATTC ATATTTATGT 480  
 10 TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540  
 AATnTTATAT ATAAATCTT AAGATTGAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600  
 GATGTTTTAA CAATAGAACA TTTAACAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660  
 15 GTATCATTTA AGCTGAAAC 679

(2) INFORMATION FOR SEQ ID NO: 913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTCAAATT CTAATGCAGA TGCACCACTA ACCATACCAT 60  
 30 ATATAAAGAA AAAGACCACG AAAGnAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120  
 CATTGGAGTT TTCAGCGCCA AATTTAAATG TCAATGsGAA AATGATAGAG TATGCCCTTA 180  
 TGATACCAA ACTCATTAAA CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240  
 35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300  
 ATGACTTAAT ATAATCACTA CGTTTAAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360  
 AGTCTTTTTT aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420  
 40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480  
 AATAAATATA TGTTTGnTT CTCGTTGCAT AAAAATACT TAGGAACATA CCTTTCATTA 540  
 45 TACTTCACCT CGCATTATGA TTTT 564

(2) INFORMATION FOR SEQ ID NO: 914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60  
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAAGTAA AGATGCAAGT 120  
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180  
 AAACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240  
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300  
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTAAACAA 360  
 AAAGAAGCTA AATTTGAAAA TGGTGTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420  
 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480  
 15 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATAAG 540  
 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600  
 20 CAAACTAGTA ATTAAGAnTT CAAAAACAAC AAATGCTAAn TCC 643

## (2) INFORMATION FOR SEQ ID NO: 915:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAGG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60  
 35 ATAAAGGGCA ATCACATGGT GGTCTTATT GGAAGTTAAT AAATAACAAA GGAAAAAGAA 120  
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180  
 TTTGATATAA ATAATTTGGA TATAAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240  
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAC TATCAATAAT 300  
 ACTTATTTT TAGCTGTATA TGATAATGCA ATAAACATTT TTGAAGATTT GTTTtCGCCT 360  
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400

## (2) INFORMATION FOR SEQ ID NO: 916:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



EP 0 786 519 A2

CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60  
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120  
 5 GGATTTCGCA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180  
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240  
 10 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAWAC ACAATCCTAT 300  
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360  
 AGGATTACAG ATTAGCGCAG AAAC TGCCAA AGAACATATA 400

(2) INFORMATION FOR SEQ ID NO: 917:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAAATGCG 60  
 TGTATCTGAA TTTTAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120  
 30 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180  
 TGCAGACTTA GGTGTTTGTA TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240  
 AGTACCGGCG TTCGTTTCAGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAAGAG 300  
 35 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360  
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

(2) INFORMATION FOR SEQ ID NO: 918:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1220 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

GTCTCCAGCC ATTWACCAC ACATACCTGT CCATTTACCT TCTTTATGTG ACGCTTCAAT 60  
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACACG 120  
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTAAA TCATTTGTAC CGATACTGAA 180  
 55

GATTCCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC 300  
 TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTTAATT GTTGCAACCA TTGGGAACAT 360  
 5 GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT 420  
 ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACCT AAGAATGGAT TCATTTCTTC 480  
 10 AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC 540  
 ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT 600  
 AGGCATTGGG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC 660  
 15 ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC 720  
 GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTTCTTGTC 780  
 AGCAAAATAA CGCTCACGTT TATCTTGATA AGCGATTAAc TCATCTTCAG TTGGATTAAc 840  
 20 GATTACATCA CCATTTAATC CATCTACGAT AATCATGTcG CTTTGTTTAA CTTCTTGAGT 900  
 AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG 960  
 25 aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTTGTAAG AATTCTTTAT TTAATTGAGC 1020  
 AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG 1080  
 ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC 1140  
 30 AGCCGCACGT TCTTTCATGT ATTcGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT 1200  
 TGThACATCC GCTTAATGTG 1220

## (2) INFORMATION FOR SEQ ID NO: 919:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45 TTAGATTGAC TGCAAAATGCC GACTCAAAAG AACAAACACA ATCATTGATT CAACCTGTTA 60  
 AACAAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG 120  
 AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTGTAAT ATATGATGGT ATTACTAATG 180  
 50 GTGCTTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTTCTAAAG GGTATGATTA 240  
 ATCACAATGA AAACCTTTGTT GATATTAATa AACCTATTGA GCaGCAATTA AAAGATGCAG 300  
 TGCAATTTGT TAATA 315

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

ACTTTGTAAA CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT 60  
 TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCCT GTGACGGTTA ATATCGCAAA 120  
 GAATATACCT GAGAATAAAA CGCCTGTTAA ACCAACTTGC CAAGGAATAC CCATGGTTAA 180  
 CACAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGcTAACG CAATTGGATA 240  
 TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA 300  
 AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA 360  
 AACTTGCGGG TTAAGTCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA 420  
 GATTTCTCTT TTA 433

(2) INFORMATION FOR SEQ ID NO: 921:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

CTATTTTATT TGTATAGCGC TTGATGTAAA GTTATTTTAG CTGTCATACT ATGTGCTAAA 60  
 CCAAATTCAG TTGTGTCATA TCTTCGCTTT TTTGTCACTG TTATAATAGG TATAATCGGA 120  
 TATAATGAAA AGGkGAGGGA GGATTCAAAA TGCGTAGGTT ATTATATTCA TTTCTTTTTT 180  
 ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT 240  
 TTAGTGGTAC AACACAATTA TCACTTGTAC ACACACATAC ACTTATTTTA GGTATGTTTA 300  
 TGkkTTTAAT ATTATTACCA TTGGaGAmGT TATTTAAATT ATCAAGTTAC TACTTATTTA 360  
 ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA 420  
 AGGATTCTTC CAAGTCACT 439

(2) INFORMATION FOR SEQ ID NO: 922:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: lin ar

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

	GTAATATCTA TATACGTATA TTTAAATGAT ATATCTGGGT ATTTTCTTTT TAATAGCGGC	60
10	TGTAGCCAGT CATAAATATC TtTCGaTGTT GCGCATTAA CGCAACTTGC ACATATAACA	120
	TCTGCCCCAT AAACCTACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA	180
	GATTTTTATT ACACATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA	240
15	AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT	300
	ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG	360
	GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC	420
20	AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG	474

(2) INFORMATION FOR SEQ ID NO: 923:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 554 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

	TCAACTTG TG AAGAAAATTT ATTAAC TTTA GTAAC TCTTC CAACAAAACC TTGTGATGTC	60
35	ATCACAGCCA TATTGAA GT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTC	120
	ATCCACTGAT CCGGATTTCT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA	180
40	TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA	240
	GATTCTAACT GGCTAATCTT ATTTT TAGAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC	300
	CCAATCGTAC CAGCAACAAA ATTAAC TGGTA TAACTCACAA CTCGTTGTCC AAAAGACACA	360
45	GAATCACCTA TATATTGTT AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT	420
	AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC	480
	TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATnATAT	540
50	TACTCCCAT ATTGA	554

(2) INFORMATION FOR SEQ ID NO: 924:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 575 base pairs

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC 60  
 10 TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA 120  
 TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC 180  
 AACGATTTCa TTTGTTGTTT CTAAAGGTAA AAAAAGTGAC TCATCAGATG TCAAAACGAC 240  
 15 AACTGAATCG GTAGATGTAC CATACTACTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT 300  
 TTATATTAAA GATAAAGATA ATGACGGTTC AACTGAAAAA GGTAAGTTTCG ATATTACTAG 360  
 TGATCAACGT ATAGACATTC CTTTAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT 420  
 20 TAAAGTTGAC GGTAAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA 480  
 ATTGAAGTAA ATGTACCGAG GTTCTATTTT GGAAGTCTCG GTATTTTTTAT GTTGGAGATT 540  
 GCGGTAGTTT TAAAATGCnT CnTGTCnTCA TATAC 575

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## (2) INFORMATION FOR SEQ ID NO: 925:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA 60  
 GTGATTACAC CTATTAAACC ATATAAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT 120  
 40 TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnC 180  
 GTTTATAGAT CnCATTTGGG GGATCCAAAG CTTAAAAAGA TAAAAGTGAC TACCAGATAT 240  
 45 AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT 300  
 TTGCTAA 307

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## (2) INFORMATION FOR SEQ ID NO: 926:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTTCAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60  
TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120  
TAAAATCACA AATTCATACA AAAAAGACGC CTCCCATAAG TTTAGTCACC AAATGGAAGA 180  
10 CGTCTCGTAA TTAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240  
CGTGcATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTTACAT CATTCCTGGC 300  
ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360  
15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

## (2) INFORMATION FOR SEQ ID NO: 927:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 809 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

TTTAGGTGGT TTAAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60  
30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120  
TTGGTTGGGC TATATTCGTT TCGGTACTTA TTTCAACACC GTTTTTATAA ACTCGGAAGC 180  
TATCATAAAC AATTcTGCTC CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTTCAG 240  
35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300  
TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360  
AATTTTCAAA TGTATACTTT CTTTGTCTC CGCCTGCATG CCAATCAATA TTAAATCAA 420  
40 ACGACCACAA TCCAACCTTT TTGTTTTCTT CTAACCTAG GCTTGTTCCA ATACTTTCAC 480  
CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAAGA AACTTTATTA CCTTTTGT 540  
TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600  
45 GATCGTGTCT TGAATATTCG TAATCCGGGA AGTTGTTTTT ATCTAATTC ACGTAATCAT 660  
CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTTCTTT TCTTCTGATn TCTCGCAAAT 720  
50 ACATAGGTTT TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780  
AACGATTTTT AACTTTACAA AAACAAGGA 809

## (2) INFORMATION FOR SEQ ID NO: 928:

# EP 0 786 519 A2

(A) LENGTH: 1016 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

10	nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAActCAAA CTAATGATGC	60
	TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAATT TAGCAGATCA	120
	AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC	180
15	TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG	240
	TGATGTGAAG AAAGCAGTTG TCAGAATTAA AGATGGTGGT CCTAGAGATT ACTATACTTT	300
	TGACTTAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA	360
20	AATCGACTCG ATTACTTGGT ATTAAAAAAC ATACTGAATT AAATAGTTGT ACGCCAAACG	420
	TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTTTATTT TAAGTAACTT CCAATTTATT	480
	TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGGTTGCC ACTATATCCG	540
25	TTACAATTTT TATGATTGTT AATACATTCG ATTCCTTTT CACAATAGCC ACCTCGCTTG	600
	TTCAAAACAT AAACAACAT TGCATTCACT TTTAAGTAAT TATTTATATT ATTTATCCCA	660
30	ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA	720
	AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAC	780
	TAGATCGATT TGTCTTTGTA ATTTTTTCTT TTCATAACTG TGTTGGAAAT GAATTAAATT	840
35	AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC	900
	AGCTTTTTGT GCATCCACAA CTTTTtATT TACTTGWTTT KTAAAGTTG TTGATACTGA	960
	TCATATTTT TAGCAGCTTC ACCGTTnTTA GTTGTGCATG AGATCACCGG CAACCG	1016

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## (2) INFORMATION FOR SEQ ID NO: 929:

### (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

50	AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTTGTG ACTGTATTCA	60
	AAATGCAGGT ATTGATTTAG AAGTATTTAA AGACGACTTA CAAAAAGTA AACTAACCGA	120

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CGTTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA 240  
 TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC 300  
 5 TCCTAAATTA GAAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC 360  
 TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA 400

(2) INFORMATION FOR SEQ ID NO: 930:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20 TATTTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA 60  
 CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTTTATA 120  
 GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA 180  
 25 TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTGTGACA 240  
 GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT 300  
 TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG 360  
 30 ACATGGnGTG TCAGGCATAn GGCTCATACT GTGCAATATG 400

(2) INFORMATION FOR SEQ ID NO: 931:

- (i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT 60  
 45 GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTTT AATTGTAGT 120  
 AAACGTAAAC CAGTTACGGC AAATTcTCTG GCAATaATAA TGATTGCTAC TACAGAATTT 180  
 GTTAGTCCTA GTTGCAACAAG TACAATTAAA GCACTTGCAA CTAATAATTT ATCCGCTAAT 240  
 50 GGATCCAAAA ATTTCCCAT ATTTGTAAT AAATTCCATT TTCTAGCTAA ATAACCATCA 300  
 ACAAATCGC TAAGGGAAGC CAATATAAAA ATAAAACCAC TGATTAATAA CTCAATTCTT 360



ATAAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480  
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540  
 5 ACC 543

## (2) INFORMATION FOR SEQ ID NO: 932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAGAATGG GAGCAAGTAT TTACAATAGC 60  
 20 TTATGTAACCT GATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120  
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTTAAGAA 180  
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGG 240  
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300  
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360  
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 759 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60  
 TTTTGAGCCT TTTTGTGAAA ATTAACATTT TAACCTTTTT GATTTTACAA CAAATTATAG 120  
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTGTGT TAAAgyTTT TATGTTTAGA 180  
 TTGTTATATT ACTATGTATT CTTAAATTTG TTTAAAAAAT TAATGCTTTA AATTGATGTA 240  
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300  
 50 AAGGGAGTCA AATTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTTAAGAG 360  
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATAACTT ATATCATTTT TATTAAAATA 420

ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540  
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG AAATTAAAAA 600  
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAT 660  
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAA ATATCGATGT 720  
 10 GGTCATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759

## (2) INFORMATION FOR SEQ ID NO: 934:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGGAAGTCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60  
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAGAA TTCATGGTTT 120  
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGA GCTTGAACCA 180  
 TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240  
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTAT TATGTATAAA 300  
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAAGnTT 360  
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

## (2) INFORMATION FOR SEQ ID NO: 935:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACTG ACTAAGAAAA 60  
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120  
 GAAACAACCTT GTAATGTTAA TTTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAT 180  
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAAACTTGAC CGCGGTACAC CTAACGCTCG 240  
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAAATCACA GCAGTTTTCA 300

## (2) INFORMATION FOR SEQ ID NO: 936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

```

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGACTTGCAT CAGTTCTCTT      60
TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA      120
TTCGTTTAGC ATATCTTCTT TTAAAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG      180
ATACATATTA TCTTCAGAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT      240
TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTGGGCTTAA      300
AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTTAG TACGATACAC      360
TTTAATTTGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC      420
AGTACTTGGG CGCTCAACTT TAATAGAATT TAATACGCGC ATATCTTCTA ATAATTTAAA      480
AAGTTGTTGG ATAAAATTTA GGGtGTTTAA AAGTTTTATC TTGtACTACT TCATTTACAA      540
TTTgtACATC CatCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTAAACCAG      600
CCATTTGAT ATGGCTTGG                                     619
  
```

## (2) INFORMATION FOR SEQ ID NO: 937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

```

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC      60
TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTAT CGTGGCGAAC CAGCAATCTA      120
TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTTAGTTA TCGAACTACC      180
AGCAACTGCC AGTTTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGCnGA      240
TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGAtATCA AAACATTAAA      300
rCmATTAgCA CACAGCATTA ATGaAATTGA mCAATCTGaA TCCTTTTCAC aAAAAGTrAA      360
  
```

AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAAA 480  
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540  
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600  
 GCATCATGTG GTACC 615

## (2) INFORMATION FOR SEQ ID NO: 938:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAATAT CATTCGGTTA TCATAAAAGA CGCACAAGCA 60  
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTATC GCTTTGAACC ATTAGTATAA 120  
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180  
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAAT GAAAAAGATT GATAATATAA 240  
 ATGTGAAAAA GTAAGTATAC CCGTAAACTA AAGTATTCAC GGTGAGAGGT GCTCATGTCA 300  
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAAATATGT CCATACAACA CCATGTAGAT 360  
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 939:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60  
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120  
 GGAACAGACC ATGGTGCACT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATT 180  
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240  
 50 TCAATCCAAA GTCGTTTAGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300  
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

## (2) INFORMATION FOR SEQ ID NO: 940:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC CATTGATACC AATCATTTAC ATCACTGTCA TACGAACATA TATTTAAATA	60
GAAAAAAATT ATTTTAAAGA TTATACTAC TCTTAATCAT TTTAGTGAAT TAAAAAAGT	120
AGTGCAAAAA GCAAAATATA CTTTATACAC TACAAATCAT TTATTTATAA TAAAGTTTCA	180
CCAAAAAATG TTCCAATAA TGAAACCGCT TGTTTCAGCAG TATGATTATn ACTGTCAATC	240
AATGGATTTA CTTCACTAA ATCCATTGAG GAAATTAAAT GTGATTGATG CAGTAATTCC	300
AATGChAAAT GGCTTTCTCT ATnACTAAG	329

## (2) INFORMATION FOR SEQ ID NO: 941:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA CCAATTTATT TGAAGAAAAA TCCGAAGTTC AAATTTCCGA TGAAGCAAGA	60
TATACCGGTT ATTATGATTG GACCAGGTAC TGAATTGCT CCTTTTAGAG CATATTTACA	120
AGAACGTGAA GAACTTGGTA TGAAGGAAA AACATGGTTG TTCTTTGGTG ATCAACACCG	180
TAGTTCTGAC TTTTATATG AAGAAGAAAT AGAAGAATGG CnTGAAAATG GAACTAACA	240
CGCGTAGATT AGCATTTCa AGAGnCCAGA CACAAGATAT GACAGCCnCG ATATGGAGAA	300
GTAACGTTCC ATGAT	315

## (2) INFORMATION FOR SEQ ID NO: 942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 699 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCACTTTCCT TTTTATACCT 60  
 5 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120  
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180  
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCATTAATG GATCCAACCT ATCAAGAGAT 240  
 10 GGC GCATCTT TAATTCCTT CATTTTCTTC TCTATTCTT CATATTCTC TAAATCTGGA 300  
 TCTTTCTCTT CTTCCGATTC TTTTTTACA GTTCTTGTT TTGATTCTTC TGATTTCTTT 360  
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420  
 15 AGTAAACATC CCAGTGTCTT TTTCATAAAC TTTCTCCTCT TAAGTTATTT TGTTTGAATC 480  
 AAATAAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540  
 20 TATTTTTAAA TACTTTAAWT GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600  
 TTA AACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAA AATTCGC 660  
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

## (2) INFORMATION FOR SEQ ID NO: 943:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAAACGC CAAGAATGAT 60  
 CATAAATGGC ACTTCTAAAC CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTTATT 120  
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180  
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240  
 AGCAATTTTT TCAACATGTT GTTGCGTACT AATAGGGTGT TTAATGTTA AATCCTTATA 300  
 45 GAnAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360  
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 944:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60  
 TTGCTGGTAT TGAAGATTTT GCCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120  
 TTGTTATATT GGATGTTCAA TTACCTAAT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180  
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240  
 TGATGAGTAT GGAACCTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300  
 15 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360  
 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAAGGTG 420  
 ATCAGACGAT TTCTCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480  
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTG 540  
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

## (2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

35 CCGAGnCCAC CGTTCCAAAG TCCATTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60  
 TTTTGAATTT ATTAATAATG CTATTTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120  
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180  
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240  
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300  
 ACGGTATTAT TATTACTAGT CTTTATATCA GGATGtGGTA ATGrTaATA TGTGAAAGAA 360  
 45 ATaGATGAAG CAGTTAAaT TCAAAATCaA AAACAAGAAC ACTTGCCCAa AAAAGGCAAC 420  
 GGTGATCGTG TTGATCATTT TGAACGCAAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480  
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540  
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTCGAG ACGATATTAT 600  
 CAACAACATG ATGCGGATTA TCATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

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	GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT	780
	GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT	840
5	AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTG TCAATTTAGC TTTCTTAGGT	900
	AAAGACTCAA TTGTTGGTTC GCGTGGGAGT CATGCAGTAT TGATGTATGC ACCTAAATCA	960
	TTTTTAGATT TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA	1020
10	ACAAAAGAAC TATTAGATAA ACATATTAAA CAACTGCATT TAGATAAAGA GACGGAAAAT	1080
	AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT	1140
	AAAAAATAG CGAAAGATAA TCATATAAa aCGACACCAA CTGCATTTAT TAATGGCGAG	1200
15	AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A	1241

(2) INFORMATION FOR SEQ ID NO: 946:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1057 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

	TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCAGCTGA TATTATCTGT	60
30	TGCAATTTTA TGTGACGAAC TGTTGCACTT AATTTGATAA ATCAACAAAT ACAAAAAATC	120
	TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG	180
35	ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTTAC aTCAAAATTT	240
	TGAAGTAGCG TATCaATCTT TGaATCaTca ATATATACct TATGTAAATT TTTCaTATAC	300
	ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG	360
40	TGTCCTTGAC CATTTAAATC AAGCATTAAA TGATCACTCG AAGCGCCTAA AATATTGATA	420
	TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTaYCTA AATAACCAAT ATCTACAATA	480
	GCTTGTAAGA ATGATTCATG CGTTTGTGTA TTAACTCGAG GTTTAATTTT TAAAACTCA	540
45	GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTTGATTTGT CGTTGTATCA	600
	ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTTA TTTTACCCAA ATCATTATAT	660
	AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAAATAA TTTTCAATCG ATATCCTATT	720
50	TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGGCGCA	780
	TCAGATTTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA	840



CAATCTACCA TTAATAAAAT CTTATGTTTT TTTCTAAAA CTTCTGgCTA CTTCAATTTAT 960  
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020  
 TCAATATCCT GGAAAAAnCCC TTTTTTTGGG CAGGGCG 1057

## (2) INFORMATION FOR SEQ ID NO: 947:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 649 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60  
 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGA CTGTAA ATATAATCAA 120  
 AATGGCGAAT TAACAATGGA TGGTATTAGT TTAAAAACGA TTGCACAAAG CTTTGGTACA 180  
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TGCGCCGTTA CCATCGCGCA 240  
 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCATT 300  
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360  
 TTATATACAG CTTTAGAAGC AGGTTTTGAA CCGAGTCGCA TCCATTTCCA TGGTAACAAT 420  
 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAaATAATA TCGGTTATTT TGTTATAGAT 480  
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATTa 540  
 CcGAGTTAAT CCcAGGTGgT TGrAAGCCaC mTrCaCaCgA aTTTATTCaA ACyGGGcaag 600  
 AAgGATAGGT TAAAGTTTTG GGATTAAAnCC nnTTTCCCAT TAATGGGCC 649

## (2) INFORMATION FOR SEQ ID NO: 948:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60  
 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120  
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC attACGGATA 180

AAACTACTA TATAATGAA TCTGATGCTC AGAGTGTTCG TCAATTTGaa AATGrAATTC 300  
 aAAGTTTAAT TTCTGTATAT GATGATATTT TAAAAGAnAT GTCTAAATCT GCTGTGCGAT 360  
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTCACAGTT ATTAATGACC 420  
 AACAAGAAAA GCTACAAAAT CATCTGATTC AATTGCGTGA AGATGnGCAG AA 472

(2) INFORMATION FOR SEQ ID NO: 949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60  
 AAACGTTTCA ATTTCGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120  
 GATGTATCAG ACAAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACTAT 180  
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGGAATGACG AACCATATAA CAATGAGTTC 240  
 AAGAAAGATG ATCGAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300  
 GTGTCAGGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360  
 30 TGTGTGTAChG ATCTCTAATA GAATCTCAGA TGCCCCGCCAA 400

(2) INFORMATION FOR SEQ ID NO: 950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTTCTTTA AAATGACCAA ACTGCAACGG 60  
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTTC AACTTAGTCA TCACATCATA 120  
 ATCCAAAGAC ATCACACGAT ATTGATGTTT AACACCATGC TTTTTCAAAA TATCAATAAC 180  
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240  
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTCATGTCC 300  
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTCAGAAA TATTTTTATT 360

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CATAATTGTA TCTAACTCAA CGTATTCGAC ATTGCTTTT GCAGCAGCTT TCAATGACGG 480  
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540  
 5 TTGATAGTAT TATTGG 556

(2) INFORMATION FOR SEQ ID NO: 951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60  
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120  
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180  
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240  
 25 AAATAATTAA TGTTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAAGGG AATATCAATA 300  
 AATTTGGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGgaATAAT ATTCCATATT 360  
 GaAAAAGGcA AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTTTCATTC TTAATAGATA 420  
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

(2) INFORMATION FOR SEQ ID NO: 952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 730 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTTG CTGCTCCTT TCACTTTTTA AGAGTAAAAA ATAACCTGAA 60  
 45 ACATAACTTT AACATCCAAG TTTCAAGTTA GTGTAATGTA AATGATTTAC TTTGTTnTAT 120  
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180  
 GAGAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTTTATC TTCTTCTGTA 240  
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300  
 AGTACAACAA TGTCACGTTT TACTAACCAG CGTAAAATAA CTTGTGCAAT TGATTTGTTG 360

AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTTGAA GTGCTGCAAC TTGTTCTTCT 480  
 TGTTGATGGA ATGGATTAAT TTCTATTGGG TTCACTTGTG GTTGAATTG ATTGTGAATA 540  
 5 CCTAAATCTA CAATTCGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAaTTTTACC 600  
 ATTTTCTTTT AACTCCTCCA ATGCACGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660  
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720  
 10 GGATCGGTTT 730

## (2) INFORMATION FOR SEQ ID NO: 953:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTTAGGAGAT TGATTATTAC 60  
 25 AAATATCCAG TTTTGTGTTA CATCTATTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120  
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180  
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240  
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACCTCAG 300  
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360  
 CTTTAAATAA GTCTAATATT TGCCTTGAA TCGTGACATC 400

## (2) INFORMATION FOR SEQ ID NO: 954:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60  
 AACATCTGTA TAATTAGGAT CTTCTTTCTC AACATCAAAa ACATATGGTT TTGTTTCAAA 120  
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180  
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

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(2) INFORMATION FOR SEQ ID NO: 955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

AAACATTTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG	60
CGCGCCATCC aTTACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA	120
TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC	180
TGGCTCAGGA AAAACAACTG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT	240
CGCTTTACTT GcTCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG	300
CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT	360
TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG ClAGTCATAC	420
AAGAAGTGga CATTACCATT GGATTTTtAA ACCTAAAGAT GtTTATTTAT CGTAGAAGGG	480
CCTTTTTCGC CTTTAGGAAA ATAAGGTAT TTAC	514

(2) INFORMATION FOR SEQ ID NO: 956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT	60
ACAAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA	120
ATTGAGCAAT TAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT	180
GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAC GAGCTAATGA GTTGGATAGC	240
AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGTATAG CATAATAGTC ATGCTAAGTT	300
AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC	360
ACAACTGGGA AGTGTAATG TGACTGTA	388

(2) INFORMATION FOR SEQ ID NO: 957:

(A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10	AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG	60
	TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGw GACCACATTG	120
	TATCGGAAAT TCAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTCa TTTAAAAAAT	180
15	TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTTAATCAGT CCAAATAAAG	240
	GGGAACCATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAACTTTCT AGAATTATGT	300
	TAGCGTTAAA AAGTATTTTT GTTAAAtCGa GAGGTCAAAC TGCAATTtTr TTcGATGAGG	360
20	TTGaCTCAGG TGTATCtGGr caAGCTGcAC CanA	394

## (2) INFORMATION FOR SEQ ID NO: 958:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

	CCGCCATTTT TTTCGATTTC TTTTTCaAGT TTTTCACGGT CTTTGAAGA TAGACTATTG	60
35	AAATCTTTTG CACCACTATC ATCAAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT	120
	AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA	180
	GTGTTATTyT TTACGTCAGA ATCTATATTa TTTTCAAAAG TGAATTCATT TTCGTCGCTA	240
40	TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGTGCC ATCTACTTTT	300
	TCTTGATTAT CTAATTGAT TTTTGATTCA TCATATTCTG TCTTTTACC AAATTCGTAT	360
	TTATCATTAT ATTTATtATC TTTWTCTTTA GAAGATACGC CTTTAATTGT ATATTTGCT	420
45	TCAGCATACG TGTATTATC TTGATCGAAA TCAAGTGCGT AATCTAGTTT TAACTTATCG	480
	TCTTCTAAAG TATTAGTACC TTT	503

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## (2) INFORMATION FOR SEQ ID NO: 959:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

	TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG	60
5	TCTATCAACT TGATCGGTTA GGTAGAACGA CAAACTATT AATTGAATTA TCACAATGAT	120
	TCGATGATAA CGGAATTGAC TTACCAATT AGTAACCTGA ACATTTCCAC GAAAGACCCC	180
10	ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA	240
	CTATGTGAGT GTATAAAATA GACTnAGCAG CCACAAGnCG AGAGGCCGAA AAAAGCGGGC	300
	GCCCTCT	307

(2) INFORMATION FOR SEQ ID NO: 960:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

25	ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT	60
	CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT	120
30	TAGTAATTTT TAGTCCATAA TTA CTCTCTAA TCCTAACCA n GTCnGCnAAA TTTCCTCCAT	180
	GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA	240
	CACGTTTATC ACTAAAATCA TATGCATAAT AATGCACTTC ATCATCATTA CTCAAAGGTT	300
35	TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT	360
	CAAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT	400

(2) INFORMATION FOR SEQ ID NO: 961:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

50	ACAATTAGTT ATACCCAAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAAATCT	60
	GTAAATGGG GTGTAAAGC AAACGAATTT GTTACGCCTG ATGGAACAAA ATCTGCGCAT	120

GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240  
 AACTATCAC ATGAAAAAGG TyCAgTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300  
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCh GGAAGGAAGC 360  
 ATAATGCATT TGGAAATAGG AACCTTGTA<sub>n</sub> TTAnGTATGG 400

## (2) INFORMATION FOR SEQ ID NO: 962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

20 CTTTTACAAA GACAAATTAG CGGTAATCGG TAA<sub>n</sub>GATCGT TGTTGATCCA GTTGCACTAT 60  
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCTAC AAGTAATTTA CGTATATCTA 120  
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180  
 25 TGGTGACAAT AAGATTGGTA CACTAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240  
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300  
 30 TATAACCAGC TATTCAAGGA TGTTACGAAC ATG<sub>n</sub>CACATT GATGAAnCTT GAGATATA 358

## (2) INFORMATION FOR SEQ ID NO: 963:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60  
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120  
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAAATATTT 180  
 TCAAACCAT TTTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240  
 50 TGGTTGAAnT GGTG<sub>n</sub>AT 258

## (2) INFORMATION FOR SEQ ID NO: 964:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 388 base pairs  
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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

	TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT	60
10	CTCTCATGAC AGTGACAGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTAA	120
	AATCATTTCT ATTATTAATG CTTTAATGAC AACTTATTTA ATTTATTGCA TTTAATGCCC	180
	TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA	240
15	CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT	300
	TTTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT	360
20	TCTTAGCATA CTAGTCGGAA TTATATTC	388

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 602 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

	AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC	60
	TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT	120
35	GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTTAAATAAC	180
	TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA	240
	TTAAAACGAT TATATTTATT GTCACCTGTT CAAACGCACT CCTTTTCCAA ATAATAGAAT	300
40	TGCTGCTTGC ATGACAACCA TAAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC	360
	TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA	420
45	GAAACGACCA ATATAAATTC CGAATCCATT TAAAAACATT AGcACGaCAA CrATTAATCT	480
	ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATThAAA TCATCACATA	540
	AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG	600
50	TC	602

(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 744 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

	GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT	60
10	TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAAACTTT	120
	TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC	180
	ATGACATTTT TTTGAAACTA GAGAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG	240
15	AAAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT	300
	ATAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGAAAA AGTATAGTTT TTGGGTTGAT	360
	GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTPTT GCAGTCTCAA TTAGCACACT	420
20	TTGTGATGAT AAATGCAATT TCGCATAATA TGfAACGAGT TTGTTAATTG GAACTTTAAG	480
	AATGTAATCG CAATGTAAAA AGACACAATT TGTTCGAGA TGGTTTGAAG TAGCAGTTTG	540
	GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG	600
25	TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTT CAACATCATT	660
	AACACATCGA CCGAAATTC ACAATAAACT AATTAAAATT ATGTTGGCAT TTACGCTTAA	720
30	CGGACATCTT AATTAATTTA ATCG	744

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 503 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

	TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTCACGAT	60
45	CCGAAAAAGT CTACGACAAG TGGTTTCCTAA AAGTTAGAGC CACAATTGCT AACGAAAAATT	120
	AACTGGAAAG TGTTTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT	180
	GCATTTGAAA CATTGTATTCT ACTATACACA GCTGACAAGG TAAATTATTC ACCTAAAGAT	240
50	ATTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTTCCmAAT CTATTTCTTC	300
	GATAAATTTA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AwTATATTCA	360
	GTGTGTGTCy TAAAwTAWT AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC	420

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TTTTCCnAA<sub>n</sub> ATTGCnGGGG AAG

503

## (2) INFORMATION FOR SEQ ID NO: 968:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

15 TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC 60  
 ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGAA TTAGAGAAGA 120  
 AAATGTTGTA CCAACAGGTG TACCACGTAC TGaGTACTA TTTGATGAAG CTTATGCAAC 180  
 20 ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT 240  
 ATTCGCACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAAT 300  
 TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTcMAAAT 360  
 25 GCATCCGTTC GTAAAAAAta GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC 420  
 GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC 465

## (2) INFORMATION FOR SEQ ID NO: 969:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 300 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

40 AATTCCGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC 60  
 AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG 120  
 45 CAACAAGAGT GCCGGATTTA CCACTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC 180  
 GTAAAGATGA TACAACAACn ATTTACTCAC ACCTATACTC TAAAAGATTh CACACGTCAT 240  
 CACAACGGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC 300

## (2) INFORMATION FOR SEQ ID NO: 970:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAAC GTCTGCGACC TTGAGCAACA 60  
 ACATGAATGG TCTTCGGTTT CCGTGTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120  
 TGCACCATTA TGTTCGGAT CTGCATCGCA GGnATGCTGC TGGATTATCA TCCGATTTT 180  
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTACAG TACCTGCTTT GATTGGTGCA 240  
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300  
 TATGTAGGAA GCGGTGCAGC GCAGTTTAAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360  
 15 GATTTAATna ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

## (2) INFORMATION FOR SEQ ID NO: 971:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAA GCTAGCAATT 60  
 30 ATTCAGAAAT TAAATCGAAG AGTCTACAG TTAATGACTT ACCTGAACGA GATTTATCna 120  
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180  
 35 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240  
 TGCAAAGnCT T 251

## (2) INFORMATION FOR SEQ ID NO: 972:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

TGAAGCTCTT aATAAATCTT TTCTGAACA CACACCAACA AAATCGTTAT CTTCAATTAAT 60  
 50 AATAAATAAT GTACTTACAT CTTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGT 120  
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

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TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300  
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTAA CAATTCGAT 360  
 5 GATTCGTTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GCnC 414

(2) INFORMATION FOR SEQ ID NO: 973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60  
 20 TTCGTCTGtT CATAtATAtT CGTtACAAaT GAAGGTGTtG AAAaGTAAaT AAaTaCTTGT 120  
 TTacCTAAAT CTTTAAaTGT ATCACTTGGA TTACCGTTAA AAAAGTTTTG ATTCTCGAAT 180  
 TGATTGAAGT TCAtATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240  
 25 AGTAGTATTA AAAAAGTTAA AGTAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300  
 GTGCCTGATA AGGAATCAGG GCAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360  
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420  
 30 TTTGTCGGAA TAGTCAAAT TTTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480  
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540  
 35 GCTTTTTATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600  
 TTCACGTGTT CGAACAACGT AATCTTTCTT TTCTAATTTT TTTAGTAATG GkGTCAGTGT 660  
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTTTGATG TTAAGTTTTT CATCATTTTC 720  
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

(2) INFORMATION FOR SEQ ID NO: 974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTTAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGGnCAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180  
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240  
 5 nCTTCTATAT CAAATGT 257

## (2) INFORMATION FOR SEQ ID NO: 975:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60  
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTAAAAAAGT AAGAGGGGGA AATCACGTGA 120  
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180  
 AAGAAGTTAG ACAAGGTAAG ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTCGAAATA 240  
 25 CGATTTCGTAT TTTAAGTCGT AAAACTAAAA ACAACCCTGT GTCATTGGT GAACCAGGTG 300  
 TTGGTAAAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360  
 AATCATTATT AGATAAAACT GTTTTGTAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420  
 30 AATATCGTGG TGAATTTGAA GAGAGATTAA A 451

## (2) INFORMATION FOR SEQ ID NO: 976:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTTGCTAAT GGACCATAAG TTTTAAAGAC 60  
 45 ATCTTCACTT TTATAACCAA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120  
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaAATAA 180  
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240  
 50 AATTGAATAA CCTAAACCTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300  
 CATGTTAATC CTTCTTTCTA TATTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

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TATAACTATG TCATAAACTG AATTTGTTGA AATTTTTCAT TATGCAAATT TATTAATAAC 480  
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540  
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

(2) INFORMATION FOR SEQ ID NO: 977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCCGAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60  
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120  
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAAACAAG CATTTGCAGG 180  
 TTTGCCGGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240  
 25 TGGGGGAATT AATTGGATAC CCCAAAAAGG AATT 274

(2) INFORMATION FOR SEQ ID NO: 978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTTCCTG TCAAACAGTG 60  
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120  
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTTAC TCCTAATAAT TCAATAATGA 180  
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTTTATA CTTGCCATCC ACCATCTCAA 240  
 45 ATaCATCAAA TTTAGCGTTC GTTTTTGTTG TATTACCTTC TTTGATATAA GGGCCTTGTC 300  
 TATGCACTTT ATAAATTGGA TGATTTAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360  
 50 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTCACTT GATGCTTTAC 420  
 CAAACAAGGC ATAAGTCATT GCATCAAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480  
 TTATTAAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTTCTTCT TTAAAAAAGG 540

CGTTTTCTAA AATATTTTTT ATCTTTTATAG ATTGGATATC CgATAATTCT TTATCAGTTA 660  
 TATGTTTATA AAACATTTTCg ATAATTGACA TGTCaTCTTT TTTCACTTATT TCyATAGCAT 720  
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAATTh 780  
 GTTTTAAACT CATCATTGGA TCAGTAATAT GAGACATATT TTTAAGTTTA AAATGTAAAA 840  
 TAATTATCGT TATnTTTCAC ATGAACTThT TCATTAA 877

10 (2) INFORMATION FOR SEQ ID NO: 979:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 624 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTTGT CCAATTTAGC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60  
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120  
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180  
 ATTTCTTCCA ATTGCGCAAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240  
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300  
 30 ATTCATTATG CCCAAATTTT TAAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360  
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420  
 35 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480  
 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGAGG CATCTTTATT 540  
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTTAAAAATA 600  
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

- (i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 457 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTTCACCT ACGCTAACCA 60



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	TkGATTcATc AATTTCAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC	180
	GTGGCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA	240
5	TGGCACCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGtAATGCAG	300
	CATTTTgtAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt	360
	TTAAAtCtkc tAAtAAACTC aCTAAAGTTT TAACATCAGA GATTTnGCGG TAACCCTTCT	420
10	AATTTcACAT GTCCTTGAGC TAATAATGTT GCAGGAA	457

(2) INFORMATION FOR SEQ ID NO: 981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 997 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

	ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA	60
25	AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA	120
	TATTCCTCTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTAAAGTAT	180
	AGTGCATACA TTTGTTTAAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC	240
30	ATACCACCTG GTTTAAGTAC TCTATTcATT TyTTTAAcG CGACTAAATA GTCTGGCACA	300
	TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC	360
35	ATTGCATCAC CATGAACAAG TTAAACATTT TCCATTGAAG CAGTTTTTTC TTTCTCTACT	420
	TCTAACATAT TCTCACTAAA GTCAATACCA GTAACCTCAC CTGTTGGTCC TACAGCTTTG	480
	CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT	540
40	CTAACACCCA TGTCTTTTCAT GACGCGTTTT CTCCATACTT TATGCTGCTC AAAACTAATA	600
	ATATTATTTA ATCTATCATA TTTTTTTGAA ATATTTTGAA AAACGCGATG TACTTGCTCT	660
	TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA	720
45	TATCGTGTAa GTAATGCTTT ACTTCACTTT GATTATATTT CTTGAAGTAT GATGGATAGT	780
	AATCAGACAT ATCTTCAAT AAATAATTAT ATATTTCCGA CTCATCAATA TTGATACCGA	840
50	AATGAGATAA CGTAAtATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT	900
	CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCAA TTCATTAATT TCAACAATTG	960
	CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT	997

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

```

10  CATTCCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG      60
    CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT      120
15  TTACTAATTT GCTTTTTTCCA TTCTTTAACC ATAAATCAAC TTGTAATTGC CACTCAATAG      180
    GATGATTTTT AATATAAATT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT      240
    GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC      300
20  AGCGACAATA TTTGATATAT TGATTAATTG CGAACTTTGA TAATTTATAA ACAGCATGAT      360
    AATCACAAGG CGCCTCATTA AACAACCTCAC TAATTTTGGC ATTTCTTTTT TCAGCGACAT      420
    ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT      480
25  TGAACGTATG AAGTTTTTCGA GTGAATGGAT TAATAACAT ACTTTGAAA TGATTGAACT      540
    TCACTTTATT ATGACAATAA TCAACATCAT TTAAATAACCA ACTTACTTTA TATCCCATTT      600
    TCTTKAAACC TTCCGTTTCGT TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT      660
30  CAATAACATA TTTATTATTA ATCAAAATAT CCGGAATTG TTTTATTTCT TTAAAAAATG      720
    GCTCTATCTC TACTTTACAT CCTTGTTGCT GTATCATCTG TGCTAAAATC AATTTACTTT      780
35  TATAATGTTT AATCGTTTCA TTATTAAAAC ATTTTGTGTC CGCTAAATGT TTATGTGCAA      840
    AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTTGCCACAC ACCGGACAAA      900
    AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG      960
40  CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTTCA      1020
    GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG      1080
    TGGCCTAATT AAATAATCCG TTAATTCCAG GTGGnCnC      1118

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## (2) INFORMATION FOR SEQ ID NO: 983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATTa TTACGAGTCC 60  
 ATATTCATTG CTTCAAGTGAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120  
 5 TCAAGGTAAT TGCAAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180  
 TCTAACTGTT GGTAAGAAAT GCAACCATTa CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240  
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269

(2) INFORMATION FOR SEQ ID NO: 984:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCAAGTG GAAnnGGTTT TGGTGGAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60  
 ATTGTATTTT TTAACTTTTC CGCATAATCT TGATGGTCGA TTAACTTTTT GCGATAACAA 120  
 25 TATTCAATCA CTTCAGAAAT CGCTTGCTCT GATATCTCTT CTTTTGTAA ATATTGTATA 180  
 ACTTCTTTTT CAGTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240  
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298

(2) INFORMATION FOR SEQ ID NO: 985:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 431 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60  
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120  
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180  
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTCTt 240  
 GAAAAATGkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GArGARgATT tATTtAACyT 300  
 50 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrATtGAA AGTCGATGAT 360  
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420

## (2) INFORMATION FOR SEQ ID NO: 986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

AAGGTTAGGn	TGGAGTACCC	AAAGTAGGTT	TTAAAGGTTG	GAAATACnAG	GAGGATGAAT	60
AACATGAATC	AGTCAGTCAA	ATTACTTAAA	CATTTAACAG	ATGTAAACGG	CATTGCTGGT	120
TATGAAATGC	AAGTTAAAGA	AGCAATGCGT	AACTATATAG	AGCCTGTCAG	TGATCAAATT	180
ATTGAAGATA	ACTTGGTGGC	ATTTTTGGAA	AGAAAAATGC	TGAGAATGGT	CAATACTCAT	240
TATGATTTCT	GGTCTATGGA	TGAAGTGGTT	ATGGTAACAA	GATGTAAACT	GTTATTCATT	300
ACGCGTGGTG	TGTGATCAGC	nGCACTCAA				329

## (2) INFORMATION FOR SEQ ID NO: 987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

CATATTATTT	nTATATGAGT	TTACCAGTGT	CAAAAAAACA	ATTGCTTAAT	GCCAACTATA	60
TTACATGCAT	TGTTTTAACA	TTAATTGGAA	CGCTTGTTAT	TAGTTTATAT	GCTTATGAAG	120
CAGATGTGAT	TGAACCAAAT	TCAATCTATT	TTCAACTGC	ATATGCATT	GTCATATCTA	180
ACTTCTTGTC	TATACCAATT	GCATTTAGTC	AATTTACAGA	ATTGCGTAGA	GTCAAAGTGC	240
CATATGGTAT	ATACGTGTTT	ACTATTATCA	TTTTAGTTCC	ATTTTTATTT	TCAATTGCAA	300
TAGTATTGGT	GAATTATTTT	GTTCTAAGTC	AATCATCATT	CCCAGATTTA	TATTCATATA	360
TTTTAAATAT	TGGTTTCTA	ATTATAAGCA	TTGTTATACT	TATTGTTAAT	TATTTTAAAC	420
AGCTCAATAA	AATAAATACT	AGAAAATTTA	AAGGAGGCAG	TCGATGAAAT	TAGAACATAT	480
TACAAAAAAA	TACGCTCAA	ATGTCGTTT	AAATGATATT	GATTTTGACT	TTGGCGAnAG	540
TAGAA						545

## (2) INFORMATION FOR SEQ ID NO: 988:

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(A) LENGTH: 607 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTGAAT CAACCGTTCC 60  
AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT 120  
TAAATATTG ACGGCATCTT CATCAATTTT CGGTGCTATT GTTTCATATC AGCGCGTAAT 180  
TCCCTGTTGA TGTGTTTCAA TGGTGTGATC TTCAAAGTAG TGTTCATTT CGCTCACAGT 240  
AGCATAAGGG AGTGTATAAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT 300  
AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCAT AGTTTAACCT 360  
CTCTTTACCA TCGTGATTTC CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTTAA 420  
CTTTCCAATC GCTTGTCTTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA 480  
TAAATCCAG CTATCACAAT GTATATCAGGT TCTTCTTCTT TCATTTTTC TACGAACATA 540  
TCTAAAATAT ACGCTTGATC TTCTAAAAGC TGTGTGCCAT CTAATATTTT CCCTAAGTGC 600  
CAGTCTG 607

(2) INFORMATION FOR SEQ ID NO: 989:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 722 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC 60  
TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA 120  
AGTAAAAGAT AAAGCGCCTG AAATTGGCTT GGCACAGTA TACAGAACGT TAGAGTTGTT 180  
AGCTGAACTA AAAGTTGTCG ACAAATTA CTTTGGTGAT GCGTCGCTC GTTTTGATTT 240  
AAGAAAAGAA GCGCAAAAC ATTTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT 300  
AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA 360  
TTTTAAAATT TTAGATCATC GTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA 420  
AGGTAAAGGA TAGTAAATTG CGTAGGTTAA ATTAACCTTC GCTTTTTTTA GAGGTGTGGT 480

TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600  
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTG Tn TGGGGCATT 660  
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720  
 TC 722

## (2) INFORMATION FOR SEQ ID NO: 990:

- (1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 366 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

ATCCAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAA AAGAATAAAT 60  
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTCAA GTA ACTAAAT 120  
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180  
 25 AGTAGATGCC AATTGGCAA CTTATATTAT GATTGCCGTC TACTTCTTGG G TnATGACTC 240  
 CAACTTATTG ATAGTGT TnT TATGTTTCAG ATAATGCCCG ATGACTTTGT CATGCCAGCT 300  
 CCACCGATTT TGAGnAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360  
 30 GTATTC 366

## (2) INFORMATION FOR SEQ ID NO: 991:

- (1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60  
 45 CTGTAATAAAA TTCTAATTCT TCATCTGAAA CTTTTACAAT ATGCGCCAAT GGCAAAAAGG 120  
 TATGAATAGT TTGTCTTAAA TCTTCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180  
 CAAATACGAC AGTACCATTT GCATTTAATG TTTTGGTAAT CAATTGATAA TGTGCATCTC 240  
 50 TCATCGGACT ATCGACCAA TCAACAGAAC AAAAATGTAC TACATCATTT TCATTCACAT 300  
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

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10 AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGT CTTTCTTCC      60
AACATACCGC CTATAATGCT CAAAAAGAAA TCAGCAGTGG AACCCTACG TTCCCTACCG      120
15 CTTTATCATT TTCAGGCTTA AATATTTTAA AAATTTTGTG AGGAATCCGC TTAAAAAAAC      180
TCATATCTTC AAAAAAATG ACAAATTTA AATTTTGA TAACATCATT TTTTAGTAAA      240
TGTTATAATT TCTTTATAAT ACAAATATCG AAAGAAGGCG ACTGACTTTG AAAAAATTAT      300
20 GTTCATTAAT TGTAGGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGnAAAAGA      360
ACnAACnAA A                                                                371

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(2) INFORMATION FOR SEQ ID NO: 993:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

```

35 ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT      60
GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTCCGTCA ATCATCGATC      120
AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCGATTCAA      180
40 CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG      240
ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCAATGTCG TTTTGTGATTT TAAAGCCCCT      300
ATAGCAACAA GTGCTTCAAT ATGGGAAACT ATTAAACTA TTGAAGATTT TGATATGATG      360
45 TCcAGTTTTt TTGAtAAAtG GCTTATAtG ATCATCATCC TATACCTTTT CGCAACCTTT      420
TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGTATTCT ACCAAGTTTA      480
50 TGCTACCTAA ATGGGnTATA TAAATAAGC AAAGCAACGT GCTGATAACA                    530

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(2) INFORMATION FOR SEQ ID NO: 994:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 551 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

	TATTGGATTn TTnCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC	60
10	ATTAATATCA ATCCCACTCA AATTCTTTCA CATCATTGAG TATAAAATAA TATGGTGATA	120
	TACGTTGAAG TTGATTnTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA	180
	GTCATCATCT TCAGTGTTTA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG	240
15	AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA	300
	TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCTT TCAATATATA TAAATGCGCT	360
	CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTYAC	420
20	TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTACT AATAACAAAT AACTAATTAT	480
	GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC	540
25	AAAATAATAA A	551

(2) INFORMATION FOR SEQ ID NO: 995:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 729 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

	ATTGCGCCACC ATTAGGTAGT GGAACACGAA CTTTCATCATC TAAACCTTTA CCAATTAACG	60
	CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC	120
40	CAACGATTTG ATAACCTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTTAC	180
	CAATTTTAAC AACGTTGTGA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT	240
45	GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT	300
	CAGAGTTCTC TGATAAGTCA CCAATGAAC GTGCAACTTT AATTTTCTCT ACAACTTCAG	360
	GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTTCAAAA CCTTCTTGAG	420
50	TCATTGGATA TGCTTTTGA TTTTCCATAT TGTCATCTTC CTTTACTGAA TTATACTATT	480
	GCTTGCTAAC TAAAGACTGA ATTTTGTG TCATAATATC TATTGCAACT TTATTGCTCC	540
55	CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA	600



TTAGTATCTC GTGTTGAAAC GGCCTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720

TnTTnAACA 729

(2) INFORMATION FOR SEQ ID NO: 996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60

GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120

AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180

GAAATCATTT TAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240

GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTTT GCCAGCAGCT AAATAGAGGT 300

GTATGTACGA CTTCCAnCTG TAGnG 325

(2) INFORMATION FOR SEQ ID NO: 997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCama TACATTTAAA AATAAATCAG 60

TAGTAATTAA CTGTTGGCTA CGCTGTTTCAT TAACCACTTT AGCCTCAACT AGTCCTTTGG 120

CAATCAATGT CTTAACTGCA CCATCTGAAT TGAtACTACG AATTAATTCA ATATCACTTC 180

TTGATAATGG CTGTTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGAtAAT 240

TTCATTTGTG aCTTTTGTTT AATTGAATTG T 271

(2) INFORMATION FOR SEQ ID NO: 998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60  
 5 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACTTCTAT AAGTAATGCA TATTGCGAGT 120  
 GCAGGaATGA ATGAGTGCTT GATTAAATC CTTATGGGTG GTTGACATAA TTAAAAGAAA 180  
 10 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAGTAGGT ATAGTTTAGT TTTGAGTAAA 240  
 TCTTTTTTAAA GGTGTACTTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTAAATCGGC 300  
 CTAAATAAAA TAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAACACAC 360  
 15 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTGTC CTTTAGTGTA 420  
 GCGGTAATTT TTAGGACTTT TTGGTGnAA AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480  
 TTTACCGCCA AAGCCATA 498

## (2) INFORMATION FOR SEQ ID NO: 999:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 568 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

TGAGCTGGTT GTTTATTATC ATCAGTTTTT TTCTGATTAT CATCTGATTT ATCTTGAGAT 60  
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120  
 35 GCAGGACGTT GCTTTGTAGG TGCTTGTTGC TGAGGTGGCA CATATTGATA TTGATTCTGC 180  
 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATTCTGCTC TTTTCTCTCT 240  
 TGTGCTTTT TCTTTCTCTC TTTTCTGCA TTTCTTTTT GACGCTTTTC TTTTGTTC 300  
 40 TGCTTTTGTT CGTTCAACAT ACGTTCTTTA GCTTTATTCG AATGATCTAC ATATGCAAAA 360  
 ATTGCAATA CTAATCCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420  
 GTTGTAATCA TTTTCTCTT ACTTCCATCT TCATTTTTAT TGTAGTCGTA ATTTTGATTC 480  
 45 GACATACTCT CCCTCACTC AACTAATTT AAATATAGAA ATTATCACGC AACCATTAAAC 540  
 ATTTTCACAA CTAATTTGCG ACCnAGTA 568

## (2) INFORMATION FOR SEQ ID NO: 1000:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

5	AGTGTTCCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC	60
	ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA	120
	ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAACTAC AAGTGTAAT AAACCTGCTT	180
10	TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAACCAAT AATCAATAGA	240
	GTTAATATTT AGAAATAAGA TAATAGTACA TAAACAAAT CACTCTATTA CATATTAATT	300
	TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATTGCAA CAATTCTACA	360
15	TATATTTCTT CAAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT	420
	GATTAACTA AATTAATTAG TTAGCCTTAA ATTTAACAAA TTAAATCAA CCGAATGAGG	480
	CTAAATTGGT TATTTTTCAA GATATGATTT GTATAAATCA AAACATTTCT TACAAATCAA	540
20	ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA	600
	TCTACTGTCT CATCTTTCAG TTCTTTTTTA CGGGTCTGTT TTCTAATTTG AGCACAACTCT	660
	TCGATTTCTT TATCTAAATG ACTACCAATT AAATCTATTT CTTCTATTGT TAAATCGCTA	720
25	TCTCCATCTT CTTTATCTC TGGTATTATT TTTCTTCAA CTAAGTCACG ATATAGTGTT	780
	TTTGAATTCT CGTTCAATTT CGATTGCTGA TTTTGAATAC TTTCTCCGC ACCAATGTAT	840
	ATCTATTGGC ACTAGCTTCT ACTTTTGATC CATCAATAAA AATTGAATTA TCATCAATAA	900
30	GATTTTGCTT TAAACATTGA CTATAGAACT GAATAAATAA AGATTCAATT AACGCATCAG	960
	TATTAGGATT CACTCTAAAA CGATTAATAG TTTTATAAGA AAGTGTTTGA TCTTGGGCTA	1020
35	ACCACATCAT TCGAATACTG TCATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG	1080
	ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGATGATAG GATGTTGCAC	1140
	CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTTCAATTAA	1200
40	CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG	1260
	GGGTCATGTT ATAATTTTTA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT	1320
	TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG	1380
45	CAAGTTGGGG AAAAATGTCT TATTTTTTCA AAGTATTTAA AAGTAAAATT ACATGTTAAT	1440
	A	1441

## (2) INFORMATION FOR SEQ ID NO: 1001:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

	TAATAATATC TGTTCATATTA AGTCTCCCTC ATTAGAACTC ATTATAAATG AAGTTATTGT	60
10	GTGTGTGCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG	120
	TTAATAAATA TGGTTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTtagatt	180
	TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA	240
15	AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA	300
	TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGTCATC ACTCAAKTAT TGTAAATGAT	360
	ACACTTTGTT GAGACATCA TTCATTTTAA AGGTTATTTA AACAATAAAC AATTACAGTC	420
20	TATATAACAA TTTTGTtATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA	480
	GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTCGCAAG TCAAGCATAA	540
	CATATTTAAC AATTGCTTTG CTTGGTTTTA CCAATGGATT AAAAACC	587

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(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 522 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

	CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG	60
	TTCGTCCAAT ACCTTTTGTT GAATCGAATT TACCACCTGA GCGTATATGA AAATGTACTG	120
40	TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTT AGTTTTACGA	180
	TTTCTTTTTA CTtGAAAATC TACATGGTAC TCACTTGGAT ACTTTAACCA ATTTGAATTT	240
	TTTTCTTCTT TATGAGATTC AAACTTTAAA TTTGAATGAA TTGAGCCTTG TTTTTTAACA	300
45	AGTAATACAT TCTTGTCATA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT	360
	ATATTtGTWT TCTCATCATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTTCCCA	420
	ATATCATCCG GTGCTGTTGA ATTTTATCT TTATTAGTAA CATTACGTTG CTTTTGTGAn	480
50	CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT	522

(2) INFORMATION FOR SEQ ID NO: 1003:

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(A) LENGTH: 323 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

10 TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAT GCGTTCTTCA ACTTGTTGCC 60  
TTGCCTCTCC TTTGAAAGGA ACAATTCGAT CTCGAATAA GTCCTCAGGC TTGTATAGAT 120  
TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180  
15 TAAAACGTTG ATACGATTGG WTAGGTGCAA CATTTTCAAG TGTGTCACTT GCGCGTTCTT 240  
GCGTTGATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300  
TTnGAGCTTG AGCAATTCCA AGT 323

20

(2) INFORMATION FOR SEQ ID NO: 1004:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 320 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

30 TTCTAACTTG ACGTGACTGG GCATTTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60  
GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTTGGTA CGAAAAAGTC 120  
35 AGTTTTAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTTGG 180  
TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240  
GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300  
40 GCCGTAGGGT TTGAAAGATA 320

40

(2) INFORMATION FOR SEQ ID NO: 1005:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 305 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

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CGATATTTAT AAAAAATAAT ATTTCACTTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180  
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240  
 5 CTAAATCTTT ATTATATGTG ATTAAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300  
 TATTG 305

(2) INFORMATION FOR SEQ ID NO: 1006:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

20 TTCAAGATAT CAGTATAAAT AAAAAGTTAA TATGCTCATT ATAGACAGCT ATAACTATAT 60  
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTATTAC CATTCTCTCT ATTTAAAAAC 120  
 ATATTTTTGG TATTAACAAT TAAAAGTGGG TATATATATT TAATGAACCA ATTTTTTAGG 180  
 25 AAAGTAGGGC TAAACCTATG GAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240  
 ACACAGTGAA TTAAAAAATA TTAAnCAAGG TATTGGGGAA GTAnCACCAG CATTAGGTCC 300  
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GnAA 334

(2) INFORMATION FOR SEQ ID NO: 1007:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 565 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

40 AGAAAATTTG TTATATTAGA AGCGAATAAT TTAAAAACAT ATTATGAAAT GTAAGAAGAA 60  
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAATTCCA TACAATAGGn GAnGTAAAGT 120  
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180  
 GTGTAGTTGA GGGGAGAAAA ACTAAAATGC AAAAATATAT TCTCAATGGA TCATTATAAA 240  
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300  
 50 AGATAATTGT ATTAATGTAA AAmATAAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360  
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAACT TTTTGTATTAT 420

AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540  
TGAAGCCATG GTTAGAAGTG GAAAT 565

(2) INFORMATION FOR SEQ ID NO: 1008:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACGTTTAC TTGAGCGACC ATCTTGATAT 60  
TTAAAATGTT TATCTAAGAA TGGCACAACT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120  
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180  
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240  
TTTTTAAATA CTGCATATTC ATATATTAAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300  
ACAAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360  
TCACGTGAAA TAYyAAGTCy ATTTTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60  
CTCAATATAA AAaGTCCCGC TTAAAATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120  
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180  
ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240  
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGTAATGTC ATATCTnTAT TTGATTCTTC 300  
ACCAGTTTGT GGTAATGATT TTGCTTTATT TTCTTGTGTA TTTGTATTGT TTTGGCTTTG 360  
GAGTGTGTCC ATCATTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420  
GCCTCGCTAG AACCTGCCGG AGGTTTGGAA CCAC 454

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA 60  
 ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA 120  
 AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC 180  
 TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCAGTTA CCAACCGATG 240  
 AAAATCCGCA AGCCGATGGG GAATACGGTA TTTCCGGCC GTTAACCAAC CACCCATTCC 300  
 GGTTATCCGG GAAACCATT CATCCTTTTA GGAGnChCCG GTnChAAAA GGACCTCGGG 360  
 TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAAG 400

## (2) INFORMATION FOR SEQ ID NO: 1011:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CCAAAGATG GGCTAAAGCT 60  
 TATACAATTA CTGTAGCACT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA 120  
 TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACTTCCCT TATTATGGGA 180  
 ACATTGCGGT CTCTTGAGC TATTTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA 240  
 TAATGGCACA TTCTTAATAG TATACAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC 300  
 AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACChT 360  
 AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC 400

## (2) INFORMATION FOR SEQ ID NO: 1012:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

	CTTTATGGGA TACACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT	60
5	TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT	120
	ATAGTGCAAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT	180
	TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC	240
10	TAGAAAAnGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTTGCGGGGT CATCTAGGGT	300
	GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCAGCA GCAACGCGAG TTGAACAGCC	360
15	TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG	400

(2) INFORMATION FOR SEQ ID NO: 1013:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 353 base pairs
	(B) TYPE: nucleic acid
20	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

25	GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAAATGATA AAAAAATCTG TGAGATTGCA	60
	TCATTGAGAC AAACATCGCT ATTTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG	120
30	AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA	180
	ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCATCA ATTAAATGCG ACTGTAAAC	240
	TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT	300
35	AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG	353

(2) INFORMATION FOR SEQ ID NO: 1014:

(i) SEQUENCE CHARACTERISTICS:

40	(A) LENGTH: 627 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

45	CAAAGCCTTC AACAAATAAT CTTTATTAG TACTGATTGG TTGCACAACA TAAGTTACAC	60
50	CAGGTTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTTTAGCA CTATACTCTG	120
	TTTTTCTGA TTTAATTTTA TCTTTTAGAT TTTTCTCTTC CAAGTAACTG TCAATTAGTT	180

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ATGAAATAAA TAATATAATG ATAACITTTAA TCGCGTTTTt TTTCTTCTTC ATTATGTAAC 300  
 TCCTTTTTGC TTATCTATTC AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC 360  
 5 AGATTGTAAC AAATTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATACACGAT 420  
 GCTTTTAAAA AATTTAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACTT 480  
 TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT 540  
 10 AATTACCGAT GAAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCn 600  
 ATTATAGACA ATTCAATAAT TGCGATG 627

(2) INFORMATION FOR SEQ ID NO: 1015:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA 60  
 ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTGAGTTG AAGAAATTCA 120  
 ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC 180  
 30 AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA 240  
 AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT 300  
 AAAAGAACAA GCAATTCAAG CGATTCAACG TCGCAAAGC ATCGATGAAA TAAGTGAGCA 360  
 35 ATTGGAACAA TTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAAG AACTAGCTAA 420  
 ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA 462

(2) INFORMATION FOR SEQ ID NO: 1016:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTTAA 60  
 50 TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTCCATC AAGTGTAACC 120

ATAAATTGCG CATATCCACC nAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

(2) INFORMATION FOR SEQ ID NO: 1017:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

GTGAAAACAT ATAAGATCA n ATAAGGTAA AACAGTGGTT TGTGTCATTA GTGGTGGTAA 60  
 TAATGATATT AATCGAATGA AAGAAATTGA AGAACGTTCA TTACTATACG AGGAAATGAA 120  
 GCATTACTTT ATCTTAAATT TCCCTCAACG TCCAGGTGCA TTGAGAGAAT TTGTAAATGA 180  
 CGTATTAGGA CCTCAAGACG ATATTACTAA ATTTGAATAC TTAAAT 227

(2) INFORMATION FOR SEQ ID NO: 1018:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

GTCTTACTTG CACAAGGTAT TATTTCTATC TTACTCGTTG CTTTCGCAAT CATGCTATAT 60  
 ATCATTAATA TTTTAGATGC ATATCGTAAT GCTGAACGAT TTAATCGCAA TGAGGAAATA 120  
 AAGGATCCGA AGCGCGTATG GTGGCACATG GGACAAGACG TTCCCATACT TACTAATCTC 180  
 ACCAGGTACA TnCTTATTGA TATTGTAGTG TAATTCCATT ATATTATGTT GGAGTAGCAT 240  
 TACAATACAA TTATACACGC GCCTCGAGAC nACATAGATG GGTG 284

(2) INFORMATION FOR SEQ ID NO: 1019:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 779 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

CAATCATCAC ACATAAATGT TCGAATAGGA TTGTTTTTAA GTCGTTTGA CTCAGTTGTG 60

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CACCTCAATA TGAGTTACAT GGTGATTTCG ATATGAATAA CCATCTTCTT GATTGTAAAT 180  
 AAAACTATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA 240  
 5 TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTG ATAATCGAAT 300  
 AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA 360  
 TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTCT GAATTTAAAG TAGGCGGATT 420  
 10 AGTTTGTCCt TctAGGATAG CaCGATTCCa TTCaTgATTA TCTTCAAAGT CGATTGGTTT 480  
 TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT 540  
 CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT 600  
 15 CCCACTCCCT ATCAATGTAT ATAGCATTAT TTTAACACAA ATTGCTAACG ACACATTTTA 660  
 AATCTACTTG CTTTTTAATA TTTAGTAAGA TAACTTTTA GTAAGACTTG AGAATTTATA 720  
 20 TAGAGGGGGA GCGTGTCTATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA 779

## (2) INFORMATION FOR SEQ ID NO: 1020:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

30 TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC 60  
 35 TAACTTAAGT AATACTCGCT TTTCTTAAAT CCTTTAGAAA GGAAGTATnT ATCATGATTA 120  
 CTTCAATCAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA 180  
 CAGCGTCATG GATTAATGTA GTAGAnCCAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC 240  
 40 AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTTCCCGTA 300  
 TTGAATATGA CGAAGATACT GGTTACTCAT TAATCATTAT TGATTTACCT ATCGTCAATT 360  
 CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG 420  
 45 GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTT AGAAAATTTA CCTAAGCGTG 480  
 ATATTAATTT AAAATTTTAC AGCAGATTTG CATTAGAAAT TTAACTACT ATTGCCGACC 540  
 ATTATAATCG TAACTTACGA TTACTIONAATA AAAGTAGAAT TCGTATTGAG AAAGAATAA 600  
 50 AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT 660  
 ACTTTTTAGC TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG 720

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AAGCCATCGA AACAACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840  
 CTTCCCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900  
 5 TATTAACgTT ACCAAyActc GTATTTAGTT TCTTCGGTAT GAATGTGTCG 950

(2) INFORMATION FOR SEQ ID NO: 1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAAACT 60  
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTTCT ATAGCGTTAA TTTTTCATCG 120  
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180  
 TGAAAAAATAT TTAGTGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240  
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTTACAAA GTTCATTATT 300  
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360  
 TCAAGaTTTT GAAAAAGGTa TTAaaaCAC ACCGAaTACG aTGTTTTtAA TnGGTTCAGC 420  
 30 TCAAAAATTT TCAACAGGGT TACTGTAAa ACAGTTAGAA GAAGAACATA AAATAAATAT 480  
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAaACA TCTAAGCC 528

(2) INFORMATION FOR SEQ ID NO: 1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATThCGGT TAAAgTAKGt TTCAGCTTCT CTCaTTTTAG AAGTACCGaA AAtTGGTTGG 60  
 TTAtCTGGAT TTAAtTtCAC GATAAATATT GCTTACTTTG TTAaTTGTr AAATGTACCC 120  
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180  
 50 ACAATGATTT CTTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240  
 TAATACTTCA GAGTCTCTGA ATAATGCACA AaTGAaATA CAAGTTGTCC AGTTTGGTAA 300

EP 0 786 519 A2

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTT GAATTAAATC 420  
 TGTAAAACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480  
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTTT 540  
 AATAAAATGA AAAGAGTCAA TTTCACATTT GTATTAAATT TTGATCAAGT CAACAAGAGT 600  
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660  
 10 ATTTGATAAA ACTTACACTT TTATAATGaT ATCAAATTTA CAAaGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60  
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120  
 TTCTTTTTCA TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180  
 TCGGGaATcG GGTATTATT TTGTcAAAA ACCGTGCGATG CAATGATTCA TAATCCACAA 240  
 30 TCAGCCCAGA TTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTT 300  
 ACAATTAGAT TATCTTCACG TACAAGATTA TAAATATGAT AAAACTATTC ACTTGaTTAA 360  
 TTGTATTAAT TGaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420  
 35 TAATTTAAAA AAATTGTTTA TAAAaGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480  
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACaATTAA TCCTCAAATC CAATTAACCT 540  
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTTGTTGTG CTTGAGCATT ATTAAAAAGA GTATTTAAAT TTAGTTGTTG GTTTGTAATA 60

EP 0 786 519 A2

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTCGAAATA ATGCTTATCT 180  
 TTATCTGCAG CTAACCTGAA TTkCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTA 240  
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300  
 CAACAGATTT AkGAATGCCA AGCCCTTTAA CAATTTCATC TGATGCATCT GCGCTTAATn 360  
 CTAATGAAGA TAAAAACGAt TAtCTTTCAT CkktTCTTGG AACTTCACTT CATTTTCAAA 420  
 10 ACGGTCATTA AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480  
 ATTTTTC 487

(2) INFORMATION FOR SEQ ID NO: 1025:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAATTTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60  
 CTCCTTACAG TCGATGAATA GTATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120  
 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180  
 30 CAAAACATATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240  
 ACCTTATCAT AGCAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300  
 35 CACATTTGaT TAAAAAGATA CTAAGCAATT ATTGtAAAAT TAAAACCAAA AAaGCAACAC 360  
 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTAlnAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60  
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCAGA AATTTATCCA TChATGATTG 120  
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

CTTATATAAA AATGGCACAA TTATTTTCATG TACCAACAAG AACAAATATTA ATACGTCATT 300  
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

(2) INFORMATION FOR SEQ ID NO: 1027:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTG GTTTTAATAA TGGTGATACT GTACCAGTAT CGAGTGCTAA TTCAGTTACG 60  
 ACTTTCTTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120  
 TATGTTAGAT TGTACTTCTT AAAAAGTTG TTAGAGTAGT AGCGATTAAAC TTGTCTTTGA 180  
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTTAAATTAT GTTGATCAGA CATTAAAGTT 240  
 CTCCTCCAGA CATACTATCC GTTTTTnTCT CTTTTCGGAT TGGTAATCAT TAAAAAGTTG 300  
 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GCAAAAATTA AAGTATGTTT 360  
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420  
 CATTTTTAAA AATAACTGTn ATAGAAAAGA 450

(2) INFORMATION FOR SEQ ID NO: 1028:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 535 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTCCGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60  
 ACTTTTCGATA GGGAAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120  
 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTTaAGCCAA CGTAAAmCAA TTTTAGCaGT 180  
 TTCAATAAAc GCTTCTGTAC CTTCAAtCTG TGrACCaATA TGACAATGTA CACCTTTTAA 240  
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300  
 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360  
 aACACCTGGa TTAACCTGTA AtACAACCTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420



AATTCATGT TTCGTTTTAT TGTTACCATG GAAATGGATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC	60
GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTTCAGGT TCGATTCAAT	120
TTCGTTGTTA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT	180
CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA	240
TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CcATAGACT AGTTTGATAT	300
TTATCTACAT CTCAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTTnAGT	359

(2) INFORMATION FOR SEQ ID NO: 1030:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

TACATTGGTA AATAATCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA	60
TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT	120
AATTTTIGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA	180
CTTCCATCTT TAACTAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT	240
TTTCCACCTT CTTTTCTTga TTTTTCACCC TGTGTTGTT GGTGCGCTCT CAAATTAATT	300
ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T	341

(2) INFORMATION FOR SEQ ID NO: 1031:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

5 GTCTAACTTT AATGTTTAAA AAnCTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60  
 AATATTATTA ACAGGCCCCAG CTTCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120  
 GATGGGTAGA CAGCCTTGGA TTGTTCTGGG TTATATGCGC GTGGCAGAAG CAGCAACACA 180  
 10 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240  
 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300  
 GAAAnATTAG CTTATGnAAC GGTAGG 326

## (2) INFORMATION FOR SEQ ID NO: 1032:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

25 ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60  
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120  
 TGATTTGTCG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCGGCA ATTCATTTAT 180  
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240  
 nTCAATCGAT ATCCTATTTT TCT 263

## (2) INFORMATION FOR SEQ ID NO: 1033:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

45 TTTCTATAGA GGATCCTGTA GAGATGCAAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60  
 ATAAAGCTGG CATAAACTAT GTAAATTCGT TTAAAGCTAT TTAAAGATGT GATCCTGATG 120  
 TTATTTTAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180  
 50 TAAGTGGTCA CCTTGTTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240  
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

AGCAACAACCT CCGATATTTTC TTTTCCCATA ATCATtCATT ACCATCATCA TTTAAGAACT 420  
 TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAAACT ACAATGCATA 480  
 5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTTGT TTAAAATTTT CTTTCTTAAA CGTATACTTT CTGGTGTAAC 60  
 20 CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTTA GAATACGCGG 120  
 TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180  
 TTTAGTGATG TTAACAGTTA AATCATTTTC ACGATTATGT TCACCAACAA TCATACCTTC 240  
 25 ATAAACTTCA GTACCAGGTT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAATGGC 300  
 ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360  
 TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420  
 30 TGTCAATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480  
 TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTACCTT TaCGTGcACC 540  
 TAAkGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCA 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60  
 ATCGTTAACG TCTTAGCACC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120  
 50 CTTAAAGATA TCAAAGATGT GACGCATATC ATATTCAGCT CGACAATTCC TTAAAGTACC 180  
 AGCATTTAGA AGGAATTATA TGAntTAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

## (2) INFORMATION FOR SEQ ID NO: 1036:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

15	AATAATGAGT AGGTTTGTAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC	60
	TAATGCGTCC ATTACATTTT GCAATCATTG ATGAGGTTGA CTCAATTTTA AATCnACGAG	120
	GnCGACGCCA TTAATTATTT CTGGTGAAC T GAAAAGTCAA CGTCACTTTA TACACAAGCA	180
20	AATGTTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC	235

## (2) INFORMATION FOR SEQ ID NO: 1037:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

30	nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT	60
35	AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTGCTT TATTGCCTAT	120
	CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT	180
	CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT	240
40	GTATCAnATG ATGCAAGTAA TCA	263

## (2) INFORMATION FOR SEQ ID NO: 1038:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

50	ATTGTACCTG GCACAATCTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT	60
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ACCGTTATGA CATGTTGATC ATTTTnTAGTn AATGTTAAAG CTATAACGTG TGATATTGCG 180  
 AGTCTGTCGG CATTCAATAT CTTnAAAATG CCCTACAT 218

(2) INFORMATION FOR SEQ ID NO: 1039:

- (1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTTTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60  
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120  
 AATGAGAATA ACCTTTTnGAT TTTTCATGCA TAAGGCGATT CAATCAAAAG CAATCACCTT 180  
 CCAACTGAAT TGTCATTTTG TAAAATAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240  
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTTT GTTATGTTAA AGTGGTACAT 300  
 TAATCATGTA TTTCGTATGA TAATTAACGA CAAGTGTAAT GGTAAATGT ATTTTATGGA 360  
 TGGAAATGn ATAATAGGCC TGGGTTACCA TGGnGC 396

(2) INFORMATION FOR SEQ ID NO: 1040:

- (1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

AGCATTTTGT TTAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCCATTAC 60  
 AATTTGACCT TGATATACAA TTTCTTTAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120  
 ATTTAAAATA GGTGCATTCG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180  
 ATATTCTTTT GCTGCATGAC TTA CTGTTAC GAAGGCATTA ACACGATGTT TTA CTATGTG 240  
 TTTTCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAT TTATTAATAA AGGCATTTTT 300  
 CGCATATAT TCATGCGCAT CATAAACAA ATTAGCTTTT TtATAATTGC TTAAATAGAC 360  
 CATTAATAAT ACGTCGAAAT CATTTGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

(A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCGTTT CTATTTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60  
 ACTTGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120  
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTAA 180  
 15 CTTTGTATTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240  
 GAATAATAAC CAACnGAATT AATTCCGn 268

(2) INFORMATION FOR SEQ ID NO: 1042:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60  
 CAGATCATTG GAnTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120  
 ATGGATTAAA TCTCGTTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180  
 35 AAATCATCAA TTAAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240  
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

(2) INFORMATION FOR SEQ ID NO: 1043:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTCAGGTA 60  
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAGCATA TCAAATTATC CAGAATTTAG 120  
 TACCAGATTT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGGn TTCCACAGAC 180

55

AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300  
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCGGCA TGAACGAAAT 360  
 5 TATATTTAA<sub>n</sub> GCT<sub>n</sub>CTAAG 379

## (2) INFORMATION FOR SEQ ID NO: 1044:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGA<sub>ACT</sub> TGAAGACCAT GCAGATATA<sub>A</sub> ATGAAATAAC ATATCGATTA TCAAAAATTT 60  
 20 TCGGTATTAA ATCTATTAGT CCAGTATTAA AAGTAGAAAA AACAATAGAG GCAATAAGTG 120  
 CAGGGACAAT TAAATTTGCG CCATT<sub>n</sub>TGAA GAAAACAGCA CATT<sub>n</sub>TAAAAT TGATGTGAAG 180  
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240  
 25 GTATTGAAGC ACTTCGACAA TATTTCA<sub>GTG</sub> aATGTCaAAC GTCCAGATCA TGgAAAATTCg 300  
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT G<sub>n</sub>AAGAAGTT GGTTCCGGGG 360  
 30 TTCCAGGTGG GATT<sub>n</sub>TACC<sub>n</sub>G TTGGGTACTG GTGGGTnAA 399

## (2) INFORMATION FOR SEQ ID NO: 1045:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

A<sub>n</sub>GATAAACA GAGGAGCACA AAAATGAAT<sub>n</sub> nAAATATAAT CATCAAAAGT ATTGCGGCAT 60  
 45 TGACGATTTT AACATCAATA ACTGGTGTG<sub>CG</sub> GCACAACAGT GGT<sub>n</sub>TGATGGT ATTCAACAA 120  
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180  
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240  
 50 ATAAACATGT TACTTATCAC ATGAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300  
 TTTATAATAA CGGTGGTGGA CTTTATAAAG TTA<sub>n</sub>CTAAGAT TG<sub>n</sub>TAGATTAT CCTGGTAAAG 360  
 AAGATATTGC GGT<sub>n</sub>CGTACAA GTTGAAGAAA AATCAACGCA 400

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 626 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTTGTA GCTTTAACTT TTAGTCCAAA 60  
 GTTATCTTTA AAGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA 120  
 TTCAATCGCA TCTTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC 180  
 CATTTCTTCT GGTACTGATT TTGTTTCTGT ATTTGTTTCT GTATTTGTTT CTGTATTTGT 240  
 GTCFTTTTTT GATTCATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA 300  
 GATTAATTTT GCCTTTTTAA ACATAGCTCA TCACCCATTT ATGTGkTTAT ATAGAATATT 360  
 AAAAAGCATT TTAAAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC 420  
 ATTATCATCA TAAAAGGCTT TTTTAGTATT AATAGTAGGC TTTCTTATT GAATTGTAAT 480  
 TGTAGATTTT TCTGGCTTAT TTTTAAAATT ATATAGTTTA TCACTCAGTT CAATTACATC 540  
 ATCAACTGTA TTGTCTTTAG TAAATTTTC CTTTGTACTA AACAATGTTG TTACTGTATC 600  
 TGTATTAGCA GCGnAATTCA CTTCTT 626

## (2) INFORMATION FOR SEQ ID NO: 1047:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 317 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGACTATTAT 60  
 CCTGAAGAAA CAGATGCTGA TAACTTGTC ACTCGCATTC AAAAATTAGG TATGACGCGT 120  
 CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA 180  
 GnTATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT 240  
 ATACAGACTA TTACGATCAT GTCCATTATT TAGCnCACTG TCATTATATG GTGGCATTAT 300  
 GAGGGTATAA ACTTAGn 317

## (2) INFORMATION FOR SEQ ID NO: 1048:



# EP 0 786 519 A2

(A) LENGTH: 223 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10	ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG	60
	AAAAATATTT TTAGTGAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC	120
	AAGATTACGA GTCATTAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAG TAGGTTAGCT	180
15	AAGnAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG	223

(2) INFORMATION FOR SEQ ID NO: 1049:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 608 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

	AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT	60
30	GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAAATGGT	120
	AAATCTAACT CTGGCAACCA TCTAATTAAA TCGACTGAAA TGGCATCATT AAAGTATGTT	180
	GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC	240
35	GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTC CyGACGATTA	300
	TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTtAtAA ATTcAGTTGr AAACGGtGGt	360
	TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATThAT TTAAAGTCGC TCTAAATCCC	420
40	ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTACCTAA	480
	TTTGAAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTGATCTG TAACTTGATA	540
45	GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC	600
	AAAGGCAT	608

(2) INFORMATION FOR SEQ ID NO: 1050:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 292 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

5 TGTTTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60  
 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120  
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180  
 10 TGCTTTTTGT ATCTATTTAC GTTTTTGGTG TAGTCGGTTT TGGATTTGAT GTTTTCAATT 240  
 ATTGTCTAGG TAKTATCTTG ATGTYATWTA TTTCTTGGTT TAGGThTATT nT 292

## (2) INFORMATION FOR SEQ ID NO: 1051:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 734 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

25 TAAATChTCA AAGATTTCTT CTAAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60  
 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120  
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTTCATTGA TCTCATTTGC 180  
 30 AATTTTATTG TACATTTTAC TTAATTTTTT TCGAAATTC ATGTTATCGC CTCTATTGTT 240  
 CAGCTTCTTC TTGCTCTTCA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTTCATATT 300  
 CCGTTTCTGG TAAAATTCCA AATTTTCTAT ACTTATAGTA ATTTTGTCTGA CCTACTTGAC 360  
 35 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420  
 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480  
 AATTTTGAAG TTGTTTATAC AACTCATACA CTGAaTCCAT AAATTCCGAT TCCGATATAT 540  
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600  
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660  
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCA CTTAATTTTT 720  
 45 CTTGAAAGT CATG 734

## (2) INFORMATION FOR SEQ ID NO: 1052:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

5 ATTTTAAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60  
 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTCACA AAGTTAAAGT CATCTCTATC 120  
 ACTTTTCAAA AATTGTGATA TGATTTCTGC ACTTTGTTTT TCAACCAATT CAGGCACATc 180  
 10 TCCATAAATa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240  
 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCCATA AGAGCTTGAA 300  
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTTGAC CGTTTTtGTTG ACTATTGTAA 360  
 15 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACCTTCT ATATTAGGaa GwTGATACAT 420  
 ATGTGTTCTTC CCAGAAGAAA TCAAACCTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480  
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540  
 20 ATATTTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAACCTTT 600  
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660  
 AATAAACTA TCAAAAAAAT AGAAACTAC TATCTCCAAG TTTAAACTA CTAACCTGTC 720  
 25 TTACATCCAT AAGTTTAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

## (2) INFORMATION FOR SEQ ID NO: 1053:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

40 GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60  
 ATGCTATAAC TGCCATTAAT TGAAGACCAA TCGCATCTAA TGCGACAACA CGATCGGCAA 120  
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180  
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

## (2) INFORMATION FOR SEQ ID NO: 1054:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTTGC AATTCATTG TACATTTGAC TTAGCTTTTC 60  
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120  
 5 CGATTTCTTT AACTTCTTCC ATTTTCGTATT CCATTTCTGG TAAAACACCA AACTTTTTAT 180  
 ACATATAATA GTTTTCACGG CCTAATTGAT CAAACTCTGT ATTTATCCAA TCAATATAAT 240  
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAAA TTCACTTGAT GTCCATGGTT 300  
 10 CAAGCCCTTC TTCTTTAgAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360  
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

## (2) INFORMATION FOR SEQ ID NO: 1055:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTTG 60  
 TAAGTAATCC AAGTCTACAA GTTAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120  
 AGTTGTTTTT TATTCAAAAG GAAGAAGTAT CATTGAAGGA ACTGnACTTT AAAATAAGAA 180  
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240  
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300  
 GTATGTTTga TGTAATGGaT AGTAAGCAAA TTA 333

## (2) INFORMATION FOR SEQ ID NO: 1056:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTTAGCTT ATAAATTTTT ACGAAAGTTT 60  
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGAGTATTTG CCACTTGATT AGTACTTCAT 120  
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTTAATATA TTAAGAAGCA CTCATAATCG 180  
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTTAAATAT 240

TAATACAGAT ATCAATATGG CnAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

TCCAAAACGG	AGAGCCAAGA	GTAACTCTA	CTTATATAGG	ATACGCGCCA	ATTGATGATC	60
CAAATTAGC	GTTTTCAATT	GTATATACAA	ATCAGCCTGT	ACCACCACCA	TGGTTAACAG	120
GTGGAGACTT	AGGTAGAGAT	GTAATTAAct	ACTACTTTAA	GCAGTTAGGT	AAAGATGATA	180
AAAATAAAGA	CAAAGACAAA	TAAAATTTAA	CCTGACGATT	GTGTAGCGCA	TGGTTGTAAA	240
ATTTTAACTT	TGcMAATATT	ATAGATGTTG	GTATAATAAT	AAAGTCGTAT	TtAGaAATGA	300
TwAGGaGGGA	AT					312

(2) INFORMATION FOR SEQ ID NO: 1058:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 404 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

GCCATTTTGC	GATGCTAAAT	CCATTGAAAA	TGCAATACCT	GAAAGTCCAC	CAAACAAAGA	60
ATTGTTATAT	TGACCACTCT	GTAAATATGG	TGCTAATTTC	ATGATGTACT	TATGCACAAT	120
TTGCTCAGTA	TTAATATCGA	AACTTTTTtG	AtAAGCATCT	AAAAACAAAA	TGATACCTGG	180
TATACCATGT	GATAAAGTTG	AAGGTTCAAA	ATAATCGGTT	TCAGTAGATG	CTTTTGAAAT	240
GAAATCATCT	ACTTCTGAAA	TCTCTTGAAA	CTTCTTCTTC	AATATTAGAT	TCATATCAAT	300
CATTTTtGTC	ACCACACCAA	TGCTTTTGAG	TTTTAACAAT	TTCTTTTACA	ATAGATAAAA	360
CAAATGTTTC	TTGATCCTTA	TCAATGCCAA	ATATTCGATT	GnAG		404

(2) INFORMATION FOR SEQ ID NO: 1059:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GñATGACATA AGTGTGCCTT CTTTTTCAAG ACCCTCCATA GAAATAATAC 60  
 ATGGATGTGC ACCACGñTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACTTTCT 120  
 CTTGTGTTGC TAAACCTACA ACTGGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180  
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAGAAATT CTTAAGTTTA AGT 233

## (2) INFORMATION FOR SEQ ID NO: 1060:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60  
 25 TAAATGTATA TCCTAGTGCG ATTGCCATTA ATTATCCGAT AGCTTTTTTCT GCTGCTTCCA 120  
 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTAA TGCGATATCT TCAGCATTCA 180  
 TACCAGCTTC AATTGCTAAA CCTAATTCAG AGATAATATC TGATGCACCA GTACCAACTA 240  
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

## (2) INFORMATION FOR SEQ ID NO: 1061:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTGTCAG CTTCTTCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60  
 45 TTGATCTAAG TCCTGCATGA TTAATTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120  
 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACCTACC TTCACTATAA 180  
 AAAACGAGTC TTTTATTGA AAGCCATTGC CCTTAATCAA TTAGACAAGT TGTATKATAC 240  
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTTAAGCAT ACTCAAAAAG ACTGGTACAT 300  
 GTATACCAGT CTAATTCGAA AAAATATATT TAGTTAAAC CATTTCAAAA ACGACTTCAC 360

## (2) INFORMATION FOR SEQ ID NO: 1062:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA 60  
 AAAAGTCGGC ACATAAAATT AATATTGTGA GCAATGCCAT AGATACATAA AACACCCCATG 120  
 ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA 180  
 CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA 240  
 GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTTA 300  
 GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAAATACAT 360  
 TTTCCCAAAC CTTACCCAGT GGACTCCTAG GCACCACCTT 400

## (2) INFORMATION FOR SEQ ID NO: 1063:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA 60  
 AACGAAACGT TTCGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTTGC 120  
 ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT 180  
 AGAAGATATT GATAAAGCAG AACTAAATA TGACCATACT AAAGTGGAAA AAGTAAAGT 240  
 ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC 300  
 AGAAAAAGGT AAAGGTATTC TTGATAAAGA AGGTACTAAA GTaATTaAG GTAAGACTAA 360  
 ATTCGCAAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT 400

## (2) INFORMATION FOR SEQ ID NO: 1064:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 434 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60  
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120  
 ACTTCCTGCA AGTCATTGTC AAAAACGATG ACAAAACTT ACCTACTAAT CAAAATGTCG 180  
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240  
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACACAAGA ATTAAAAGAA CTTCAAAATC 300  
 AACTTACATC TAAAATCGAT TCAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360  
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420  
 TTGGAAGAA TGCT 434

## (2) INFORMATION FOR SEQ ID NO: 1065:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60  
 ATCATGATTA TATGGAAACG AAAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTTAA 120  
 CATTGAATTT TGAAGGTAAn TAATTGGAAG AGATTTGAAG TTGCATCGTT ATTATCGTTT 180  
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

## (2) INFORMATION FOR SEQ ID NO: 1066:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60  
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120  
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTGCGTT GTAATAACTT AGGAGAGTTA 180



## (2) INFORMATION FOR SEQ ID NO: 1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

```

CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT      60
TTAACTCTTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA      120
CTAGATCAAG ATAGTCCAAA TTTAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT      180
CTTCATAGTT AACATTTTCA ATCCATACTT TAGTCGTAAT GAATAGTTCA CTTCTATCAA      240
TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT      300
CAATATGTCT ATAACCCGCT TTAATTGCTT CTTTAACCGC TTCTGCGTGT TGTTCCTGAG      360
GAATTTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTTCAATAT      420
GATTCATAAA ATGAACCTCC TTTATCTtGT ATGTCCACTA TAAACCATGG AGCGAACTCT      480
ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTTT AACATTGTCA TCATAATTAT      540
CACTAGCATT GATTTTtagCA ATATGATTAT CATAATTATC AATTTTATAT TGtAGTAAAT      600
CTCTCGCATC ATGAATTGTC TTTAAGTTTT CAITTAATTC TTCGAGTTGC TTATTTAAAA      660
TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA nTGCGCTAAC CTGCAAAATT      720
CGATAAGCGA TTCAATACTG ACGCCTGCA                                     749

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## (2) INFORMATION FOR SEQ ID NO: 1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

```

TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTAT GACGATGGCA AATATnATAA      60
GAAnATAAIt AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT      120
TTATGCCACC GCTCAAACCT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAACtTGTG      180
ACGTGAATTT CTAAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA      240

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TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTTAAACCGC 360  
 TATTGACAAA TATGAAGCGG AACCACCGTT GTnTTTCTTT TnCAGGTCCA ATTGAATAAA 420  
 5 TGTGATGAA TAGAAT 436

## (2) INFORMATION FOR SEQ ID NO: 1069:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60  
 20 CTTTAACCAA GCACTTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCTGAAGC 120  
 ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTTAATATA 180  
 TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTCGT TTAAGTCATG 240  
 25 TGTAACAAGC ACTAACTGTT CACCCTAATT TTAGACGCCT TTCATTTCAGG TAGGTCCTTAT 300  
 TGAAACTGAA AACTTTGaTG ACCTTTTGca AaGCCATTAA CTGTATAAAG CATAGATCCT 360  
 CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420  
 30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCCTG GTATCAATAT TTGTCCTATT 480  
 GGATAACCCC TTTTATTAAA AACTAACACT CGACCTTGGA CCATACATTG CTACGGATAA 540  
 ATTATCGGCA C 551

## (2) INFORMATION FOR SEQ ID NO: 1070:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60  
 AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTTCAA 120  
 50 AGAAATAATA CGTGTAACAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180  
 TATTTAAAAA TTTCCGTCAA AATTATCAC ATTATGCCAT CTATCTTTT TCGTTAATTA 240

CAGAGTCATA TCCAATTATA CnGGC

325

(2) INFORMATION FOR SEQ ID NO: 1071:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 771 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

15	TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAnAAT	60
	ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn	120
	ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT	180
20	ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA	240
	TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTTC	300
	ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC	360
25	GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT	420
	GATGAAGCCT TACAACCACT TTATAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC	480
	CGCCCTCAAG ATAAGGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG	540
30	ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG	600
	AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA	660
	TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT	720
35	CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAAA AATGTGATGT T	771

(2) INFORMATION FOR SEQ ID NO: 1072:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 237 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

50	CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTCGCG	60
	CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT	120
	TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn	180

## (2) INFORMATION FOR SEQ ID NO: 1073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

CTTCTTGTTGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG 60  
 CATTCTCTCT CACCGCAATA CTA AAAATTT CACGTGGATG TACAATCGAA CTATTTAATG 120  
 TACCTTTAAA AACACAGGTT TCTTTAATCA CTACATTTTT TGAATTTAAC AATAAAATGA 180  
 CAAAATGTTT TGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG 240  
 GTTGC GTTAT TTKTATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA 300  
 ATGCTGCTTT TAAAGTAATT GCTTTTTGTA ATCCAATCCC TTTAACTTTT ATCAAATCGT 360  
 TAATTGAAGA TTTTTTCAAT TCATTGAGAT TCGAAGCAGA TTTAAGCAGT TCATTACTAA 420  
 TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT 480  
 TCGAAAGACT TTTTGCACCA TGGCTTAACA AACGTTCTCT TGGCATTCTT GAAGTTACCA 540  
 TTTCTTTAAT TTTCAAAAAT ATACGCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG 600  
 TGAATTGATA AAAAAGGAATA TAAATATAAA TGGACAAGG GGTAATAGTT TAATCGGCTT 660  
 AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AATATGACATA 720  
 AATAGTGAAT TGG 733

## (2) INFORMATION FOR SEQ ID NO: 1074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTTC TTGCCATTAT 60  
 TAATTTTGCC GAGCAGTAAT GGGTTGTTAA AGTATCCATC AATTATGCTT AGCAATATTG 120  
 AAAAATTTAA ATGAAAAGC GGTTC AATTC TTGAAAATA GTGTATATT ACATTTTGGT 180  
 AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCAATTGG TAGTATTGTT ATCTTATAGT 240

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TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAAG GTATGAATTA 360  
 ATGCCGATTA TTAGTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCG AAAGCGTATT 420  
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480  
 GATTTACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTTtTTCTG CTTATTTTTA 540  
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600  
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660  
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720  
 15 CACTTTCITT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768

(2) INFORMATION FOR SEQ ID NO: 1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TTAATAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTTT ATAAAGTTGT 60  
 ATTTCTGTGTC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTC CATCGGCAAT 120  
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180  
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTACTTC TTTGATTTT TATTATAAAT 240  
 35 TTTTTCTAAA TCTCGTTGTA ATAAATCGTC TAAACCGCT TCATCTTGTG TAAATCCAT 300  
 TTCATTCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCT TTTGAATTA AAGATTGCAT 360  
 TACTTTTGCh TnAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

(2) INFORMATION FOR SEQ ID NO: 1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 753 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTTATCTC AATCTGCTGA AGCAAAGAGT 60  
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAAACAAAG ACGGAAAAAT GTTTCATCA 120

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAA TGTGCGTGA CAATCCAGAG 240  
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTAAACACA TGGTTTATCT 300  
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTTACCAGA GCATAATTGG 360  
 GGTAAATTACA AACTTGTTTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420  
 10 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTTGTAG AAGCTTTACA ATCATACAAT 480  
 AAAGATAAAG TCATTATGAT TTTAAATTAT CCTAATAATC CGACAGGTGA CACACCTACG 540  
 CATAAAGAAG TGACTIONCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600  
 15 GTTATAGCTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660  
 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720  
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753

## (2) INFORMATION FOR SEQ ID NO: 1077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGGG AAGCAAGTGG TGGGAGAAAA 60  
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTTAAA TAAAAAGGAT ACTTAATGAT 120  
 35 ATGAGAAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180  
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240  
 rCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300  
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360  
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtTCATGCaA ATGAT 405

## (2) INFORMATION FOR SEQ ID NO: 1078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

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	CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT	120
	CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA	180
5	AGTATACTTC ACAGAATTTA TAAAATTGTT TAGTCATCAT CTTCACTGTT TAATTCAAAA	240
	ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA	300
	ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CAtATATATT	360
10	CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG	420
	TTTTAGTTTT ACCACCCCAA CGTTTTGTGA CTTTAGGTAA TTTTAATAAC GTGAACATTC	480
15	CGCCAATTAC TAATAACAAA TAAC	504

(2) INFORMATION FOR SEQ ID NO: 1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

	CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG	60
	TTTATGGTTT ATACCATGCA GCATTGTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA	120
30	AGAmACATCC GCCACGTTGG CAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT	180
	TCCACTTTGT AACATTTGGC TTTTAATCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA	240
	TTTAATTATG GAATTTAGAG AACAAATATT AAATTTATTA GCAGAAGTAG CAGAAAATGA	300
35	TATTGTAAAA GAAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa	360
	AACAGTTGGA TTATTATTAG AGATTCAAAA TAAACTTGaT ATCGAAGTAT CTATTATGGa	420
40	CTTTGaTAGA GATGAGTGGG caACACCAAA TAAATCGTT GAAGCATTAG AAGAGTTACG	480
	ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA	540
	TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA	600
45	ACTTCATTGA CAGATCAAGT ACTAAAAGGC AACTCATTc AAGAT	645

(2) INFORMATION FOR SEQ ID NO: 1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

5 AGATGCCAAA ATCAAAACCA ATAATTTGGC AACAACATAT AAGTCCAATT TACCGGACCT 60  
 nTAAACTTAT CGTACTGTTA AGAACCAAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120  
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180  
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240  
 TAACATCCCT TATGTTTAAT TTACTCT 267

## (2) INFORMATION FOR SEQ ID NO: 1081:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

25 ATATTTGTCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60  
 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120  
 ATTGATTTAT TTGCCAAAAA TAAGACATTA GGTTCCTAGTG AAGCAAAGCC CTACTTGGAT 180  
 30 GAATACCATA GTAAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240  
 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300  
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAAACT 360  
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420  
 AGATTGATCA TTTCTAGTG T 441

## (2) INFORMATION FOR SEQ ID NO: 1082:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

50 AAAATTTCTT AGtTGATGGT TATGTGTGTT GATTTGAATA ATTTGTAGCG AATATTTTGT 60  
 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTT AATCGTACTA ATTTTCAGCG 120  
 TTTGATGACA AAAGTGTATG TCCAACTTA AATAATGGCG ATAAAATTTA AGTCATGGGT 180



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GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300  
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360  
 5 AAATTTCCAA ATTTTGCTTA CTATCTTTCT AATTTTACTT TTATATTGTG 410

(2) INFORMATION FOR SEQ ID NO: 1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTCC CTTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60  
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGG TTTAGTTATG YAAAGTAATG 120  
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180  
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240  
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300  
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTG AATTTATATA GGCATCAAAT 360  
 GCAACATTTA TCATTAAGTG CAATGTTGTt ATCTATTACG ATaAACGCCT TTATAAATAC 420  
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTTG 480  
 GACGATACTA CAGTTTTCAC TTGATAAAAA ATTA AACCT GTATACATTA CAGACCAAAA 540  
 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586

(2) INFORMATION FOR SEQ ID NO: 1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60  
 ATCAATAAGA AAACAATAGA TGATGTATCT GCAGTTTCTG AAGTGAAATA TGATATTAAA 120  
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180  
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360  
 ATCAATCATG AAGAACTTT AGCTTATTTT GAAGCACATA GTTATTTTGG ATATGATCAA 420  
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480  
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540  
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600  
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

## (2) INFORMATION FOR SEQ ID NO: 1085:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTaT tAaTACcATT TATTGgAAaT 60  
 25 tCcACcCATT TCCcGGgCtT CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120  
 TTTAGCTTCA TCTATTCGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180  
 ATTAAGTAGC TTATTTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240  
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTCC TTCGTACTTA CTcATAGCTA TTTGTGAATA 300  
 ATGACCAACT TTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360  
 ATCTTTCATT TTAGCAGCAG GCGTACCATC ACGTTGTGAA TACAAGTACG TATATGCATG 420  
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTTCCT CTGATTTCATT 480  
 TGGATACCCT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTTCG 540  
 40 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600  
 ATTATTTCCA GATTGAAC 618

## (2) INFORMATION FOR SEQ ID NO: 1086:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

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CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120  
 GTTCAACCAA ATCGTGTTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180  
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAAAC TTAACTTTAA AGTCCAAAGT 240  
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTT TGAAGAAAGA 300  
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360  
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420  
 AGTAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480  
 TAAATTATTT CTATATATAA nT 502

(2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCACAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACCT 60  
 GCTGTAAACC AAATTACGAG TGGTAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120  
 30 ACAGGTAAGA CTACTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAA 180  
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTTGTCA ArACAAAAAT TCATGAAACG 240  
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300  
 35 CTAGTAATAA TGGAGCTGTT GAAAATATAT CTAAAGATTT ACCGAAAATT GAAGAAATTA 360  
 TAAGAnATCC CGAAAAATGT AAATTCCTA AATATGAACA GAATTATGCA AATTTAGCAC 420  
 ATGAATTAA 429

(2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180  
 ATGCTAAGCC AACATTGAAT AGACTTAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240  
 5 ACTATAATGA TAAGTATGTA GTTGTACTTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300  
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360  
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAAAG GCATCGACCT 420  
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAAAAGT TTAAAGTATA 480  
 AGGTTGAAGA AGGATGAGTT TAAAAATATG TGTTAACTGA TAAAAGGGGA nATCATTG 540  
 15 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGc GTGGTGTGAn 600  
 TGTTTTCTAA A 611

## (2) INFORMATION FOR SEQ ID NO: 1089:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTTG CTTTTCACTC ATATTAAGCT TATCTAGCCC 60  
 30 TTTCAATTTTA TTCATACCTG GAATCATTTT CATAATATCA TCCAGTGGTC CTAGATTTTT 120  
 CACCyGwTCA AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTT 180  
 35 CTCTAAATCT TTTGCTTTTT CTTGATCCAC ATCTTGTTGC GCTTTTTCAA TTAAACTTAA 240  
 CACATCACCC ATACCTAAAA TACGTGATGC CATACGTTCA GGATGGAATA GCTCTAAACC 300  
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTT TGTGTCACCG AACGAATAGA 360  
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420  
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480  
 AACTAACATA ATTTGTTTG GTTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540  
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600  
 TCTTTAGCAn GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

## (2) INFORMATION FOR SEQ ID NO: 1090:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60  
 TTAACCTCATT ATTAGGGCGG TAATAAAATG AACATTCGCC AAGATTTAGA AAAAATGGTT 120  
 ACAAGCTAT GAAGCAAGTA TAAGTGCTTT TGGAAGTAAC TATGACCGCG CATTGAACCTT 180  
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

## (2) INFORMATION FOR SEQ ID NO: 1091:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

20 GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60  
 AAACATTTAA TCCAGTGGAA GATCGTTTCG TAATAAAAAA ATAATCAATA TATTGTTAGG 120  
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTTGTAGTT CTTACACATT 180  
 AGCCGCTGCT AATnGCAACT TAAGAnTAGG TT 212

## (2) INFORMATION FOR SEQ ID NO: 1092:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60  
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120  
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTTAACACC TAATTCTTCT AGGCCTAATT 180  
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

## (2) INFORMATION FOR SEQ ID NO: 1093:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 902 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double
- 55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5	CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG	60
	TATTGATTTA CCTACCCTTA TTATGATTTC AATTTTTTCA TTTGTGATAT TTGATAGTGT	120
	TGAAAAATATT AATAGTGCTG CACACGTACT TGAAATGATA GATATGACGA TAGATGATAT	180
10	TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAATTTGA CGATTAAAAA	240
	TGAAAAATATC GCTTTTCAAA ACGTGAACCTT TTCATATGAT GATAAACAAG TGATAAAGAA	300
	TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG	360
15	GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCG	420
	CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCGA AAATTAGTGC	480
	AGTATTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA	540
20	TCCAGGTGCA ACGAAAGAAG AAATTATTCG TGCCGCGAAG CAAGCATGTT GCCACGACTT	600
	CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC	660
	TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT	720
25	TATTTTAGAT GAAGCAACTG CAAGTATTGA CCCTGAAAAT GAACAGCTGA TTCAAACGGC	780
	AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAAACTAT	840
30	TAAAnATGCA GATCAGATTA TAGTGCTCAA TGnAGGTGAA ATAATTCAAA AAGGTAGTCC	900
	TG	902

## (2) INFORMATION FOR SEQ ID NO: 1094:

35	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 632 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

45	ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTTTATAC ATGAAAGCAC	60
	TAATAGAATC GATTCATTTA AACATAAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA	120
	TACCAATTGT GTATGGTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AAACATTACA	180
50	AAATCAAGCT AGAAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA	240
	TGGGATATTC ACCTGGGTTt CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC	300

55

GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420  
 CACTTTTTTAA TCCGAAAGAA TCAGATTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480  
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540  
 GAAAAAAGTG GCTTATTCAG TAGCTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600  
 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632  
 10

## (2) INFORMATION FOR SEQ ID NO: 1095:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 15

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60  
 ATACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120  
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGA AGCTGGTGCh ATATATTnCG 180  
 CCAATAATAT GATGGATGGT TTGTTGCTGA AA 212

## (2) INFORMATION FOR SEQ ID NO: 1096:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 30  
 35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAACTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTCG TGAAGAATGT 60  
 TTTTGTAGAA CCGgCTTAAG AATTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120  
 GATACTCAGG ATGAATTCCT TGTtCATTAT TTTCAGCTCC TTTGCCCTGA ACCATCTGGA 180  
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240  
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTCGA CCCGTTTTAG TACTTTCTTC 300  
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TtCATTATTC TTAGACCTTT TAAGTTTGCG 360  
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420  
 GTCTAATTCA GATTTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

TTTTGATTCA ATAGGCGGTT CCGTGTATC ACTGACAACT TTAGTTGTAG CTTCATCTTT 60  
 ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT 120  
 CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCTT TATGTGATGC TTGATTGCGT 180  
 nCCCTTACTT TTTGAATAGG GGTAGTAA 208

(2) INFORMATION FOR SEQ ID NO: 1098:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA 60  
 GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT 120  
 TCTACAGCTT CATACGTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTTCG 180  
 CCGTCTGAAA ATAnGATTAA AAATCGTTGA TGTTGATTTC GACGCATTAA TCGTTCACCTT 240  
 GCAACTCTAA TAGCAACACC ATCAGGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT 300  
 GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCATTAAAT GATATTTGGT 360  
 TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAATTTT ATGTTTAATG 420  
 TTCAATGCTT TTAACGTCTC GTGGAATAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA 480  
 TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATTnAC 540  
 TTAAATCTTG TTTTTTGTA AACAATTTAT A 571

(2) INFORMATION FOR SEQ ID NO: 1099:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

5 TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60  
 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120  
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180  
 10 TTGATTTGAA GGCCGGACCn AATTTACCAh GGAA 214

## (2) INFORMATION FOR SEQ ID NO: 1100:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

20 CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTTCTTh TCTTAATTTA TCATCAGCTA 60  
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTTAC TGGATATTCT TTTTCTTTAC 120  
 25 TACGTGAGTA TCCThTTTTA TCTTCCCATA ATTCCCTCAC AATAAATTCA CCTTTTGTCTG 180  
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTTCATTG 240  
 30 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTCTT 300  
 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360  
 ACGTTTTGTT GAAGTTTTCT TTAATTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTc 420  
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAAATACAG CCAGAGCCTC AACCTTTTTG 480  
 AGTGAATCAT CATTTACAT CCCCATTTTT ATTTTGTATG CAAAGTTAAG TtCAAATTCC 540  
 AATATTAATA ATATTAGAGG aAAtTTtATG ATTAAaTCCT CGTGGATTtT AATTGTTAGT 600  
 40 TGTATTTTTT ACATATCAAC ATCACAAATT ATTTAAAAAG CGCAAATATC TTTATAATTT 660  
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATTGCGC TTATATTTAA AATAATAACA 720  
 CTGAACTCA ATGTATTTAC TTATTAAAAT TGATGTTTAA ATACAACTTT ACTAACATTc 780  
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCAtCTCTTA CAGCTTTATC 840  
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTCCGC ATTTTATCTT GCTTTTCTGA 900  
 50 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960  
 CTGTACAAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACTTC 1020  
 TTTTGATTCT AGCGTTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

TGGCATTCT TGGCTTTT

1158

## (2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT 60  
 AAATTTTGTA AATACGTGGT AAACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA 120  
 ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA 180  
 ATAATCAGTA ATCCAAATGA CAAGGGTTGT CGCCAACTTA ATGGTAAAAA CTGACCTAGA 240  
 TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTACT 300  
 GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTGT TATTTGCGA CAA 353

## (2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 194 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA 60  
 CCCCGTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC 120  
 CAATGCCCAC GCAACACGGG ATGCCCACCC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG 180  
 CCATCGCTTC GntG 194

## (2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

EP 0 786 519 A2

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120  
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTACTTTTT CGTCTCACTG 180  
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTT AAAGATAAAA GCGATTTATG CTACTACGTC ATACAAAGAG 60  
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGAATATCAT TCTAATTATG 120  
 AGGTTATGCA AGTGTGCTCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180  
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60  
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AATAGCCCTAT 120  
 40 ATTTCAAGCT CTATAAAGA GGATATTACG ATGTTTAAAG ATATAGAAAA TAATACTAAT 180  
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

1AATTAAAAT CAAAATTTGA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAGTTT 120  
 ATTAATGGTG AAATATTAAA GCAATTTTGC GATAACTATT ATGACGAATT TGaAGACCCCT 180  
 5 TTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT 240  
 TCTAATACGA TTAATAAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT 300  
 10 CATAcAGCTT TTGrAAAACT TTCTATATTT CCAAATATGA ATTTACGAAT GTGGGAAAAT 360  
 CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA 420  
 AATATTTcAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT 480  
 15 GGAACCATAT AAAGTTCTGG gAATTCATT GaGATTAGAA TATGGAAAAT CaTAAAGCGC 540  
 GCKATTGATT AGTTTAATGA ATGATTGGAG TcNTTTGAAG ATnCGATTTA CAATGG 596

## (2) INFORMATION FOR SEQ ID NO: 1107:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 673 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

ACTAGCTAAA AATAATATTC TATTCTTTTT AACATGGGCA GTTCCAGCGG CAATTAGTGG 60  
 30 TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTAAAT TAGTATTTTT 120  
 CATATTTTCT GTTTCATTTA TTTTGTAAAT TTAAATACCA AAACCTACAG GTGAGATACC 180  
 35 TAGCTATATC AATTTTGGAC TTATGAACTA TCAAAACGCT TCGTACCTTT CAGCATTTAC 240  
 TGCCGGATTA GGCATTTATT TCATTATGAA AGGTTcAGTT AACATAAGT GGATATATGT 300  
 TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT 360  
 40 TTTATTAATT CTTTACGGCT TATTIGCATT TATACTTATT ACGTTTAAAA GAGGAATACC 420  
 TATCGCAGTA AAAAGCATTa TGTATATTTT TGCATTAAGC ATATCTAGTG TATTGATTTA 480  
 CTTTCTTTTT ACAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT 540  
 45 TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTc 600  
 AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAActATtA TAAACTAATC GGAAATATAC 660  
 50 CACATAACAG CAT 673

## (2) INFORMATION FOR SEQ ID NO: 1108:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

TCACAGTGGC	GGCACAAAAA	GTAAGTGGAG	ATTATTTTAA	TTTAATTGAC	CATAACGATG	60
GCACAATGAG	CTTTGCTGTT	GCAGATGTCA	TTGGAAAAGG	TATACCAGCT	GCTTTAGCAA	120
TGAGTATGAT	AAAGTTTGGC	ATGGATTCTT	ATGGACACTC	ACAATTACCG	AGTGATGGTT	180
TAAACGTTT	AAATCGTGTT	GTTGAAAAGA	ATATTAATCA	AAATATGTTC	GTCACAATGT	240
TTTATGGTTT	ATATGAAGAA	ATGAACCATT	TATTGTATTG	TAGTTCAGCT	GGTCATGAGC	300
CTGGATATAT	TTATCGCGCT	GAAAAAGAAG	AATTTGAAGA	AATTTCAAGT	AGAGGTAGAG	360
TGTTAGGAAT	CAGTTCACAA	ACACGATATC	AACAACAAGA	AATTCCAATA	TACCTTGATG	420
ATTTAATTAT	CATTTTAACG	GATGGTGTGA	CTGAAGCTAG	AAAAGTGAAG	GTACCTTTAT	480
AGATAAACAA	AAACTTTTAG	AATATA				506

(2) INFORMATION FOR SEQ ID NO: 1109:

(1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 552 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

TGATATTGAA	AAAGATGTCA	TTGTTAAAGC	ACAAGAAAGT	AAAATTGCTC	AAGTTATCAC	60
GAATTTGTTA	ACGAATGCAA	TTAACTATTC	TTATGAAGAT	GGAGATATTA	ACGTTCTGT	120
GTATCGAGAT	GACTTTCGTG	TCATTTTCGA	AGTACAAGAT	TTTGGTATAG	GTATTAAATT	180
AGAAGACCAA	CAACGTATTT	TTGAAAGATT	TTATAGAGTA	GATAAAGCAC	GAAGTAGnAG	240
ATTCTGGTGG	GACAGGTCTT	GGATTATCAA	TTACAAAGCA	TATAGTAGAs	GCCCACCAAG	300
GCAATATTGA	AGTGAATAGT	CAAGTTGGCA	AAGGCTCAAC	GTTCAAAGTT	ATTCTAAAAG	360
ATTATAAAGA	ATAAnAATTA	AAGTGGAAC	AGCGCGTGTA	TTTTTCACGA	AGTTGTTGCT	420
GCTTTTTTAT	TTCGTTCAAA	TCTCTATTGG	TATTAAATTA	GAGTTAATGA	AGTGAATAA	480
ATTCGGTTGT	CAATTTTGTC	ATTTGTATAT	GTCGATTTGT	AAGTTATAAG	TAATAGATTG	540
TTGTGAATCA	nG					552

(2) INFORMATION FOR SEQ ID NO: 1110:

(A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60  
 GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120  
 TTTTACAACG AnATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180  
 15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240  
 ATTT 244

## (2) INFORMATION FOR SEQ ID NO: 1111:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 825 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTTGATTT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60  
 AATACTTTTA TTTTGGTACT CGCAATTTAG ATTTGTAAAC TAATTTTTTC GCTTATTATA 120  
 AAACGAAACA ATCAAGTAAA CGATAAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180  
 35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTTGTAGG AAAATmCCAA TGATAATTGC 240  
 GATAATTACT GCAAtTaATG TGA CTGTATT TTCATTTGAA ATGTTCAAtT ATttTCACTC 300  
 CTtAACAATA ACATTATATC ATGCTATAGC TTTCCAAAAT ATTGAAATAT GTAGATATGG 360  
 40 CTATTGACGA TATTTCTTAA CTTTTATATG ATTAATCGGA ATGAAAAAAG AGAAGTAGGT 420  
 GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480  
 GTATTAGCAT TTCAATTTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540  
 45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600  
 ACATTTATTG CAAATCAAAA TGGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTTGATACG 660  
 CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTTG GCAAAGAAGC ATCAAATTAT 720  
 50 AGTAAGAAGA CATTAAACAA TCAAGATGTT TATTTAGAAT ATGATAAAGA AAACCAAnTC 780  
 GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

TCCCTATAAA TCCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTTCAT CTCTTTATGC 60  
 CAATCAACGA TCGATTTACC TTTTAAAATT TAAATGTAT CTGTAATACT CTTAGCAATA 120  
 TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG 180  
 TAACGTTGTA ATGGTCGATT CATTCTAAG CTTTGTAGCAC CAACTATTCT CATCGCTAAA 240  
 TCAATCACTT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACTTGT TGGATTTCTT 300  
 ATCTGACTGT CATCTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC 360  
 GCACATAACA ATAGCGTTTC CATTTCCTT AAATTTTGTT GCACAGTTGG CAATGTTGCA 420  
 ATCGTTCCCT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA 480  
 GCAGCTTGTG CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTGGCGCT 540  
 TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAAA 600  
 TCATGACTTT CTGTCGCTCG C 621

## (2) INFORMATION FOR SEQ ID NO: 1113:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

GTACCTTGTT TTTCAAGTGT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT 60  
 GAGAAGTACT TGAAGGCACC TTCCTTGTA ATCATGGCAC GTTGTCTTTC TGGAATGTCA 120  
 TTAAATTTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATTG AGCAATGTAT 180  
 TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT 240  
 TGAATTGTTT TTACGTAATT AATACCGTTA TCTAACTTA ACCATGCGTG TGGATCTTGT 300  
 TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG 360  
 ATAACCTTTT TATCTTTTAA TGATTTACCA GCCTGTTCTA AGGCTTTTTT AAACCAACCG 420

ATATCyTTAG GTTtAACyTC aTAWtCaTGA GGATCTkGAC CAACAGGTAC AATACnATGA 540  
 ATATCGACGT TGTCTCCACC AACATTTTtA GCCATATCAG ATAGAATTGA ATTCGTCGnT 600  
 ACTACTTTnA ATTTGCCAT 619

## (2) INFORMATION FOR SEQ ID NO: 1114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAAAACCGCA CGACAATGAA AAAAGATATC CGGTTAAAAT GGTCGATAAT AAAATCATTG 60  
 CAACAAAAGA AATTAAAGAT GAAAAAATAA AAAAGAAAT CGAAAACTTT AAGTTCtTTG 120  
 TTCAATATGG TGACTTTAAA AATTTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180  
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAACTAA TGATGATTAT AATGTAAAC 240  
 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300  
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360  
 AAAAAAGAgGA AAATATATAC TTTAGTgATA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420  
 AATCATGGCT CAATCAGAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480  
 AACGTGTAAG TAAATTAGTG CTTGGTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540  
 GCTGgTTGT 549

## (2) INFORMATION FOR SEQ ID NO: 1115:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60  
 TAAAAAAGGT TTAGTGGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120  
 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180  
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240



TTATCATCTT CGATGAA

317

(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

15	ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC	60
	TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTTCATG GCTTGCCTTA TTTTATTGTA	120
	TATTTTAAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA	180
20	GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG	240
	CACCTGAAAC ATAACATCATG AATAAAGAA NATGGTATAC CATTAAATnTG AATCCATTTC	300
	CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG	360
25	AAACTTTACC CATACGAGAC ATCATGGATA AAAGCGAGGC	400

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 696 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

	TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT	60
40	TTAATTTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT	120
	GCACTAAGAT ATATCACAGC TAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT	180
	GACTTATATT TCCGAAATTC TTTTAATAAA ATAATTAAAA TGATTACATG TATCGTATAA	240
45	ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCCA CGCCGAAACA	300
	CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA	360
	TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA	420
50	ACCAATCCAA TATCTGTATT TTTATTTAAT AAAAAGTGAT TGTAATAATAG TAAATAATAA	480
	AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA	540

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTTCTGC AAATTTTGAA 660  
 AAGATACCTT GATTATTGA AACTTGTTGA TATTCT 696

(2) INFORMATION FOR SEQ ID NO: 1118:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAAG AGAACGCTCT ATAGAGACGA 60  
 ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120  
 CTCAGANTAT ATTAAATTAA AACCGTCATT AATGTGTTTT CCGAAAACCA TTGTAAACCA 180  
 TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

CTGCTTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60  
 AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTTTATATA TGAATTGGAA 120  
 TTATTTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG CTGCTGGAGA TGGCGGACGC 180  
 GATGGATATG TTCTGCCAAG GTTTGGTTTG CGCATTCACA GTTCTCCGCA AGAATTGATT 240  
 GGCTCCAATT CTTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

EP 0 786 519 A2

CATGACATTA CATGCTTATT TAGGTAGAGC GGGAACAGGT AAGTCTACGA AAATGTTGAC 120  
 CGAAATAAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATTt TAATTGCGCa 180  
 5 ACTCAAAGTA CATTTCAATT AGAACaAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240  
 TTAAGAACAG AAGTGTGCA TTTTGAACGA TTAAGTCATC GTATTTTCCA AGAAGTTGGT 300  
 AGTTATAGCG AACAAAAGTn ATCTAAAGC 329

(2) INFORMATION FOR SEQ ID NO: 1121:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTTAATATAT GTGAACATA TATAGTGTAT AGAGAGGTTA CTTGTTACTC 60  
 AATATAACA AAAATCAACT TTGTCAAAAT AAATGTGACA AAATTAAATA AAGTGTATC 120  
 25 AATGTGACAG TATAGATCAT TTTGCAAAAA GTCAAAACAA AAAAATTGTT TTAGGGATTT 180  
 TTCAAATTT TCATTGTGGA AAATGATTTG nCAAAACAA ACAACACnTT GTGAGCAATG 240  
 AAGCTTCAAT GG 252

(2) INFORMATION FOR SEQ ID NO: 1122:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60  
 CTTAATACAA TAACAAGTAT TGTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120  
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAAT TCATGATTCA ATCTCTCCTT 180  
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAT CAAnATATCT AATGAAGCAT 240  
 50 CTTTAAATCG TAAGTGTTAA ATGGTTTTCT TAATCAATTT GTTTGAATGT ATAAaAGCAA 300  
 TTAAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360  
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 270 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

AAATACAACCT TTTATCATAG TGTAATGTG TTCTACCAAGT ATTGAGAAGT TTTCATATTA 60  
 TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC 120  
 AACACAACCT TAAAAATATA TTCTAACTCT ATCTACGAAT GTACTTAAAT ATCATAACAA 180  
 TCTATTCCAA ATCAATTAC ATTATTAGCT ACCTTAAAAA CCAAACCGAG GCCTTAGGCC 240  
 TCGGTTTAAA TATATATAAC GAGCGACATG 270

(2) INFORMATION FOR SEQ ID NO: 1124:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA 60  
 AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA 120  
 TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA 180  
 AAATTTAAAT GAACCTTAGGC ATAGAAGCTCG AAAAGAAAAT GAACGTAGTT ATGATGTTTT 240  
 TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAA TGACGAGAAA 300  
 TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG 360  
 AAGAATATAA AGAAGACTTA AAAAAGTCTT ATGAAAAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1125:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

EP 0 786 519 A2

AAATATATTC GATCATTGAT AATATGTGCT TTACTATTCC AAATAACTTT CAAATTTTGA 120  
 TAATATTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTG GCCATCGACT 180  
 5 TTCACATATT TTTGAATACT ATTTCCAAT TtAAGACGTG TTGGTTCATT TACAAAATGC 240  
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300  
 TATTTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360  
 10 nCnTGTAAG TACAATA 377

(2) INFORMATION FOR SEQ ID NO: 1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTC TGTTATATCT 60  
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACCTGAAC 120  
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TThAATTGTT GGCCAACTGG TTCTTATTTT 180  
 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

(2) INFORMATION FOR SEQ ID NO: 1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 717 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTTGTACGAA TATAATCTAA AACTTCGAGT 60  
 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTTAACCACA TTAAAGGAGT ATGAATGnCA 120  
 45 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180  
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCTG TAATAATATG CTTAGCCCCA 240  
 50 ATTTGATAAG CTAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGGAACAAAT 300  
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTTGTGT TAATGCGTTT 360  
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTCATTCC TTGATCTTGT 420

EP 0 786 519 A2

AGTTCAACTT CTTTGAAATG TTTTGTGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540  
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTTAATACAC TTTCCATTTT GTAATTGCTC 600  
 5 CTATCATTA TAATATTAAT AAAGAGGTTA ATGGCATTGA TAAGCCCGTT TTTAATTTAT 660  
 AAAATAAAAA AAGCCnATCT CCATAAAAGA TAGACGAnAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 595 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCCGG 60  
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120  
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAAGTTCTGA ATAGGTAGAA CGATAAAGCA 180  
 25 AGCCTTTTCT AAAGCAAACA AAAGTTCATT CCTAACAATT TTTGATTCTA ACTTAACAAC 240  
 AGTTATCGCC GCAGCAGTAT TATTCTTCTT CCGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300  
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTTACAGCC GTGTTCTTAT CAAGATTCTT 360  
 30 ATTATCATTA CTTGTTTCAT CAAATATATT CAAAAATCAA TTTTGTTTAT nTGGTGTTAA 420  
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AACTTTCATT 480  
 35 CGAGAAATGG AATTTTGTTA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540  
 AGTGTCGGTT AGTTATTCnT TATATCTCAA GTAAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTCCTT AACATATCAT GTTCTGTTAC 60  
 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAAATGA AAAGCGTTGG CTTAATCACA 120  
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

EP 0 786 519 A2

ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACCGC TGTTTAGTTT CGGACTACCA 300  
GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGC GTA 360  
5 CATGChTGGn G 371

(2) INFORMATION FOR SEQ ID NO: 1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAAACAnA 60  
nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTTGCAGCT GGTGGCGTTG CGACTCCTCC 120  
AAGATGCTGC TTTAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGGAATT 180  
TTAAAACCAG AAGATCCCGG 200

(2) INFORMATION FOR SEQ ID NO: 1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGGCATTAAA TGCAATAAAT 60  
TAAATAAGTT GTCATTAAAG CATTAATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120  
AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTTG GGAAACCAAT 180  
TTATCCnTGA ATCGAGATGT nGC 203

(2) INFORMATION FOR SEQ ID NO: 1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:

ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTTA AGTATTGTCT 120  
 CTAACAACTT AGCACGACGT CTTAACCCCTT TAGTAAACAA TCCTTCTTTA GnTTTAGTAC 180  
 5 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 485 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAAACTGT TTGTAAGCTT ACGTTGACAA 60  
 20 TCTGGCGTAA TTGGAAAAC TATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120  
 TAACAATTCm AATAATATGr AATCACAAAg CGACTAGAAA TCCGGTAATA TGAATAATCA 180  
 TATATTCAAT GTGTAAaTAAT TTAAACAGCA ATAAATAGAC AACATAATAA TTAAACGTAT 240  
 25 TAATGCCGCC AACAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300  
 GTGTACTCCT CAACATCana ATATATGCAT AACTACGTTT TCGAACATAC TCGAATATGC 360  
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTTCAATCT TTATACCCTT TCACAGCAAT 420  
 30 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480  
 TTGGC 485

(2) INFORMATION FOR SEQ ID NO: 1134:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60  
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120  
 50 TAAAATATTA rAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATT 180  
 TTCATTTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:



(A) LENGTH: 526 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

10	TGTGACTCCA TGTATTCATG TATCATTGTA CATTTGTGAA TTGGTTGAAA ACTGATAGTG	60
	CCCGTTTAAT TACAGGTA CT GAGGATGCTT TCAGGACATG GATTTGTTCG AAAATATGAC	120
	AATATTTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA	180
15	ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAAAC TTT GCATAAATTC GTAAAAGCTC	240
	AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA	300
	TTTTaCATAA AACTTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA	360
20	AGTTGTGTAT AATGAAATAA ACGTGTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA	420
	CATATGAAAT ATTTATTGA AGTCGTTAAG CAnGGAGGCA TGAATAATGC TTCCAAATCA	480
25	TTATATATTG CACAACCTAC AATTAGGAAA GcATTAAAG ATATTG	526

(2) INFORMATION FOR SEQ ID NO: 1136:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

35	AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA	60
	TCAATATGAT AAACAAC TGT TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCTTC	120
40	TAAAGATTTA CAAGTTTTAG CTATTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC	180
	CACAAATGAT AAAAnATGGA AGATGTT CAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC	240
45	AGCAACTTTT CcAnATTTAC CCAGGTGTTT AACACGTCCT ATTGGATTTG GGCTTAGGAC	300
	AATTATTCCA TATGGGCGGA T	321

(2) INFORMATION FOR SEQ ID NO: 1137:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

ATAAATCCTT ATAAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTTCAGTT 60  
 5 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120  
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180  
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAAa TAATTtATAA AGTnTGTATA 240  
 10 AGAnCTGTAT AAGGTGTTCC AACATTGTAA AACTCATGC TTCGGACCAA ACTCATGGTG 300  
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

## (2) INFORMATION FOR SEQ ID NO: 1138:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

25 CTTGATAAGG GAAGATTTGC CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60  
 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120  
 ATCTTTTGTT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180  
 30 ATTGTATAAT AAAC TGAGAA TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240  
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300  
 35 TACGAATAAT GGC GATAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360  
 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTTGAAAC 420  
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

## (2) INFORMATION FOR SEQ ID NO: 1139:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

50 TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGCAT 60  
 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

## (2) INFORMATION FOR SEQ ID NO: 1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60  
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120  
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCCTCACA 180  
 GCAGGAGCTG AATGATGACA ATTCATGAAC ATAA 214

## (2) INFORMATION FOR SEQ ID NO: 1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60  
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAAATCTA GTTGTGCCAT 120  
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180  
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

## (2) INFORMATION FOR SEQ ID NO: 1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60  
 TTTGAGATna ATGAGTGTTA TTAACCACTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120  
 GTTTATAATA AGAAGATTTG ATAATTAACAT ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTTAGTTGTA 300

GCAGTAGCGG G 311

(2) INFORMATION FOR SEQ ID NO: 1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAACT 60  
 GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAGAACA 120  
 CTTGAAGAAG TTGGTAAAGT TTTCCGTGTT ACACGTGAAC GTATTCGACA AATTGAAGCA 180  
 AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240  
 TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTTAA 300  
 GATTAAGATT TAACTTGAGT GAGGTTGGTA CATTGAATAA TGTTCAACCT CTTTTTTCAT 360  
 AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

(2) INFORMATION FOR SEQ ID NO: 1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

nTTTTTATTG ACGAATnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCIT GAATGGTAAT 60  
 CGGTATTTTG AAGTTGTCAT GTGCTACACG GTAACCGATA CChATAAGTA CGAGTGCGAT 120  
 GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTGC TTGAACACAA CAAGTTGTAT 180  
 ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240  
 ATGAAsCTAA GATAGAAACT AGGGTGCAGT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300  
 AACCAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AAACACCATT TGCTATATGT 360  
 TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420  
 ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

AAGATATTCG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600  
TAAAACCATG Tn 612

(2) INFORMATION FOR SEQ ID NO: 1145:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 223 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAA TCAGTAATCG AAAAATATGC TTTAAAATAA 60  
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT AAATAAACCT TTGAGTCACT TCCATTTTTTA 120  
AAGGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTA ATGAAAATAG 180  
CCATTAAATG ATTTGGAAAC GGTAAGAGGG GGTATTTAAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 598 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTCGTTTTA GCAGTCTTTT TTATTGAAGT 60  
AGACAATGCA AGATTAAATG GTAGTGT CAT TTCATTTTAT TCAACTGCTA GTAATACAAT 120  
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAAACTGTGT 180  
ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240  
AAAAACAAT AGTGATTTTC CGATTTATGA ACAGATTAAG CAACAAGTAA AACAAAATAT 300  
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTGCCGTCA ATGAGAGAAC TTGCCAAGA 360  
TCTTCAAGTA AGTTTGATTA CTACCAAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420  
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480  
AGAGAAACAA TTTTTTACCA TGAAAATTG GGTAAAGGA ATTGGGTAA TTAAGCnCAA 540  
GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTCAG 60  
 CTTGAACTGG TTTGATTTGT AACTGTTCTG TTAGAAGTTG GCGTTCCTCT TTA CTGACTG 120  
 AATCAAAGTC TCCCACTGAG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180  
 15 CTCTATCAAC GCCGCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TGCGGCAAGT 240  
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACACTCA ACCTTTCAAT GCTTGTGTGA 300  
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360  
 20 TCAACACCAA CTTGGGCGGA TCnGGATTAC GCCTCCATCC 400

## (2) INFORMATION FOR SEQ ID NO: 1148:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 352 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60  
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120  
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAyTGTGAAT TATCTTAAAC ATAAGTTTTA 180  
 TAACTTGTTA ACTACAATGA TTGTTCTCTT TATTTTGTGA CTTTCTGGTG CGATTTTTTT 240  
 40 AACATTTCTA GGGTTTGGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300  
 TGACTTTACA TATAATAGAA GTATGTACGA TAACCTATnA TATTATGGCA GT 352

## (2) INFORMATION FOR SEQ ID NO: 1149:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 916 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT 120  
 TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA 180  
 5 GCACCATTTT CAACACAAAC TTTGCTGTA TCGGTATTTA CGCCTCCATC AACTTCAATA 240  
 TCAAAGTTTA ATTGACGTC CATTTTAATA GCATTAAGAC CCGCTATTTT TTCTACGCAT 300  
 TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA 360  
 10 ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA 420  
 GCTTTTTTAT CTAAATGTTT AATCATTTGA ATAGCACGAT GAATATGAGG CGTTGATTG 480  
 ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA 540  
 15 TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT 600  
 ATTGTAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT 660  
 20 CCGTCGACGC CTGCTTCTTC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA 720  
 GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CCTTTCTATT TGAAATTTCA 780  
 TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATTCCCTAT CTCTAATTGA 840  
 25 TGChTAACCA TTACCATTAG GGTCCCTGGn AAGGnTACCA ATCCCAAACC TTACCATGGT 900  
 TCCCCCATAA CGGTTT 916

## (2) INFORMATION FOR SEQ ID NO: 1150:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

40 AATTGGTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACACATCG TTTTCTAAGC 60  
 CTACGATAAA GACATAATCG TTTTCGGTTT TGTGTTTTC TAATGAGCGT TTGATGATAC 120  
 GTTATCTTC AGTTAAAGAT AAATTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT 180  
 45 AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATTCCAT AAGAACACCT CCCCATTATA 240  
 AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAAACTTT TAAATGGTAT 300  
 AAAAAaACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT 360  
 50 AACTAAGCtT TGGGACCTTT AGATGChTTC ACAAATGTG 400

## (2) INFORMATION FOR SEQ ID NO: 1151:

55

(A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60  
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120  
 ACCTTTTAGA GTAATCCAAA CAAACTTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TATTTTCTAA TGTTAGCATT AGACTGTCAA TTAACCTGCT AAGTTGTTCT 60  
 TTTTtagTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTTTC ATCTAGCATT 120  
 30 AAAAGGTAGT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180  
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTAGT GAATCGTTTT TTAAAGTAA AGAGAATTTT ATATATTACT 60  
 GGTACAAC TAAGTGTTAA TAAAGTTGAT GAAATTnAAC CACCAATAAC TGTAGCAGCT 120  
 AATCCTTTTCG AAATAAGAAT CGnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180  
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAAT 240  
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300  
 GCATTTGTGA CTACGATnCC AATTCAACAT TAGCATACC 339

55



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60  
 TTGGTTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120  
 CACCTGAAGC GCAAACTAAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAAG 180  
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTC TGAAGAAGCA AAAGTATACA 240  
 TTAACTATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300  
 TACATAAATT GAATAAGAGT AAGACCAGCG TAGCTTCTTA TATTCAAACC AGATCTGGTC 360  
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420  
 TTAAGTGCACC TACCAAGCAA CCAATTGTGA AACCGAAAGA AAAACAAAAA TATGAGTTTA 480  
 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540  
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600  
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660  
 ATTTTGAAGA aGCAAAATATA TCTGTAACCT TAAAAGGCGA TACAAAATTA AATGaTAGTT 720  
 CTAaaaaAGT AACTATAAAT GaCCATGAAA TGGCATTtTC AAGTTCCAAA ACGTATGGTC 780  
 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

## (2) INFORMATION FOR SEQ ID NO: 1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

AnAGAAAATC TACTCTTTTA TTTCACCGGT CCTTCTnTAT CTCTCATTG GCATACTCCT 60  
 TTTTCCATAT TTTCCACTTT CAnTACAGTG AATTTACATG TAATTTTACA AATACAATAG 120  
 GAGTGCACAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180  
 AAAACAATCT ACAAATAAAA TTATTATTTT TAGTTTTCAA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

## (2) INFORMATION FOR SEQ ID NO: 1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 777 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

GTTTCCAAnG	GAAnGnGAAA	AGCGTCAACC	AATGTAAC TA	TTTAAAGTCA	AAGTGT TTGA	60
CCAAATTTGA	CTTAATATGT	AAAATAATGA	GTAACAGTTA	TTACAAGGAG	GAAATATAGA	120
TGAATTTAAT	TCCTACAGTT	ATTGAAACAA	CAAACGCGG	TGAACGTGCA	TATGATATAT	180
ACTCACGTTT	ATTAAAAGAC	CGTATTATTA	TGTTAGGTTC	ACAAATTGAT	GACAACGTAG	240
CAAATTCAAT	CGTATCACAG	TTATTATTCT	TACAAGCGCA	AGACTCAGAG	AAAGATATTT	300
ATTTATACAT	TAATTCACCA	GGTGGAAGTG	TAACAGCTGG	TTTTGCGATT	TATGATACAA	360
TTCAACACAT	TAAACCTGAT	GTTCAAACAA	TTTGTATCGG	TATGGCTGCA	TCAATGGGAT	420
CATTCTTATT	AGCAGCTGGT	GCAAAAGGTA	AACGTTTCGC	GTTACCAAAT	GCAGAAGTAA	480
TGATTCACCA	ACCATTAGGT	GGTGCTCAAG	GACAAGCAAC	TGAAATCGAA	ATTGCTGCAA	540
ATCACATTTT	AAAAACACGT	GAAAAATTAA	ACCGCATTTT	ATCAGAGCGT	ACTGGTCAAA	600
GTATTGAAAA	AATACAAAAA	gACACaGATC	GTGaTaAcTT	CTTAACTGCA	GAAGAAGCTA	660
AAGAATATGG	CTTAATTGAT	GAAGTGATGG	TACCTGAAAC	AAAATAATTC	AAAGTAAAGA	720
GTAGACTAAG	CnGTCTGChC	TTTTTGTATG	AGTAAACCAA	GGTGTCAATA	ATTTGTn	777

## (2) INFORMATION FOR SEQ ID NO: 1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

TAATGTTGGT	AAATGGGTTA	AGGCTCAAGG	TCGTATTGAA	GAAGATACAT	TTATTAGAGA	60
TTTAGTTATG	ATGATGTCTG	ATATTGAAGA	GATTAAAAAA	GCGACAAAAA	AAGATnAGGC	120
TGAAGAAAGC	GTGTAGAATT	CCACTTGCAT	ACTGC			155

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

```

10  GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT      60
    TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTTATA AAAGATGAAA AGGATGACAC      120
    AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAACCGTT      180
15  GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA      240
    AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAAATC AAGAAAATAA      300
20  TCAAGATCAG CTTAAAAAAG ATATTGATGA CAAAaAAGAT AGTCAAAAAT CAGATACTAA      360
    GGGAAAGACG TACTAGCCTT TTTACTGGAA AAAGGGTTTA      400
  
```

(2) INFORMATION FOR SEQ ID NO: 1159:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 347 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

```

35  GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA      60
    TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA      120
    ATAAACAAGA CGCAAAATGT CGsATATAAA AATGAATATT TTTATATCAC TTACTIONTCA      180
40  AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsA TTCATAAAAA TGATAAAGAA      240
    TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT      300
    AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn      347
  
```

(2) INFORMATION FOR SEQ ID NO: 1160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60  
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120  
 5 TGCGGGATAT GAGCAATTAA CTA CTACTGCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180  
 GTTATGATCA TCTGTATGTG GTG 203

(2) INFORMATION FOR SEQ ID NO: 1161:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTTCCnT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60  
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTTG GAAAATTTCC 120  
 25 TACATAGTTA CTCATTTTAA TTTGTnCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180  
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTTA GTAAC TAGGA 60  
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120  
 ATTTTAAAAA ATGGAAAAAC ATGGACATn AAATTGGAAT TTCATAATAT GTCCTAATTG 180  
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
  - 50 (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

EP 0 786 519 A2

TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCAATTT GATTGTAATT 60  
 GGATGCCATA GAGTAATGAT ATGCACCACT TGATAATATA GCAAGATAGT CTCCACGTTT 120  
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180  
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAAAGCAAT GCTTGATACT 240  
 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300  
 10 TATTArTCTC TGGAAATTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGCtTCAC 360  
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

(2) INFORMATION FOR SEQ ID NO: 1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

CTAAATAATT GTTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60  
 TGACTTGCAA TGATATGAAC TTAATTTTTG CGAAAAAAGG AATCTAGATT CATATATTCTG 120  
 30 GTAAATCTAC CTCTTCATC TTTTGAAGT TGTAATTCTA GCAATTCACG TTGTATCAAA 180  
 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240  
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300  
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATCnCTC GTATCACTAC GGTCTGCTTT 360  
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCAaA 400

(2) INFORMATION FOR SEQ ID NO: 1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTTCTCGC TTCTGTAGGG 60  
 CTAGTGATAA TCATATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120  
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300

GTGAGGATCC GCTTAAAAAA CCCCAT 327

(2) INFORMATION FOR SEQ ID NO: 1166:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTTCT AACATAAAGC TTAAACATT GATATAACTG 60

CGATTTTCGAC TTCTAAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTTT 120

AAAAATAATC nGATAAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTTGA AGAAGTATTT GACGACAGAG ATGAAGTGGA 60

TTTAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120

ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180

TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240

TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAGTA ATCCAATCT CAAGAAGGTA AATGGGCAAT CAAAAGCTAA 60

EP 0 786 519 A2

CTACGATATG ACGCACAAAT GTTTAGGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180  
 AAATGGTTGT ATTCTTAGGG AAGCATTAT CCTGTTTGT TATGGATTCA TGTTACGTTA 240  
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300  
 TnATAAGCAG ATGAAAACGG C 321

(2) INFORMATION FOR SEQ ID NO: 1169:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 191 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60  
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAA TGAATTATGA TAAAATGTAA 120  
 GAnAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180  
 25 ATGTTACCAT A 191

(2) INFORMATION FOR SEQ ID NO: 1170:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60  
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120  
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180  
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAAA AnAATCGGTT GCCCTCTAAA 240  
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTA ATATGTATAT 300  
 TAG 303

(2) INFORMATION FOR SEQ ID NO: 1171:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5 AAAAAAGGTGA GAAGACAATA ACGnACGCCA AACTAaaaa ATCCATTAAC TGGAGAAATT 60  
 ATTAGTAAAG GTGAATCGAA AGAAGAwATC ACAAAGATC CAGTTAATGA ATTAACAGAA 120  
 10 TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG 180  
 ATCAAACGGA AAAAGTACCA GGTAAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA 240  
 TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAAA AACGGGTACA CCAGAAACA 299

## (2) INFORMATION FOR SEQ ID NO: 1172:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25 CCATAGCACC ATACCCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATTnACACG 60  
 TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA 120  
 30 CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT 180  
 ACTACTATTT GGTAAAATTG TTAATTCTCC TGAAATTGTA TTGATTCTGT TTGAACGAAG 240  
 TCCAATTGAT TTAAGTGTTC CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA 300  
 35 ATCACCTACA TCAAATTGGC TTTCAAATAT AATAAAGAAT CCTGTAAtTA CGTCTTTAAC 360  
 TATAGTTTGA GCACCAAAAC CTACTGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC 420  
 TTCAACACTA ATGCCAAATT TACTTAAAAT CGTCGTAATA ACTATAAACC AAACGATATA 480  
 40 CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT 540  
 ACTTTTATTT TGAATCTTAA ATCCCTGTTC AATCATTTTA TTCAGTATTT TAATAACTAT 600  
 GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT 660  
 45 TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT 720  
 AAGCGTACT CCCTTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC 780  
 50 AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C 821

## (2) INFORMATION FOR SEQ ID NO: 1173:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

CCCCGAAATTA AAATAATAAT GTATGAATTT TTAAATATGA TTTAAACGTT TTCAGTTTTT	60
10 ATGAAAACGC ATGCATTTTA CAAATAAAAA TGGTACGATG GCACTGGTTA AAACGTTTTA	120
CTAAAAACAA ATCATGAGGT GTATAACATG GCTGTCTCTT GATCAGATCT TGATCCCCCTG	180
CGCCATCAGA TCCTTGGCGG CAAGAAAGCC ATCCAGTTTA CTTTGCAGGG CTTCCCAACC	240
15 TTCCAGAGG nCGCCCCAGC TGGnCAATTC CGGTTGCTT GCTGTCCATA AAACCGCCCA	300
GTCTAGCTAT CGCCATGT	318

(2) INFORMATION FOR SEQ ID NO: 1174:

20

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 206 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

30 GTTTTAAAGC GGTATAAAG GTAAATATGC AATATTATAA ATATCTTCTT CAGAACTAAC	60
CGAATCTCTT AAACATCATCT GTTTAGATAG CGTTTCAAAT TGATAAGTTT TAATTTTAAC	120
CGTTACAGTT TTAGCTGACT GCTGTAATTT ATTTGACGTG CAGCTGTTTT CCTGACAATn	180
35 CCATACTGTC TTAAAnCTCT GCATCA	206

(2) INFORMATION FOR SEQ ID NO: 1175:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 653 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

TCTGCATCAT GATATTTTAC ATCATCACTT ATAAGAACGT CACCTACATT TAAACTTTCA	60
50 TCTAAAGCTC CAGCAGAACC TGTATTAATA ATGACGTCCG GTTTAACTT ATTAATTAAT	120
AATGTCGTAG AAATTGCAGC ATTAACTTTT CCAATGCCAC TTTGGGTAAT CACTACTTCT	180
CTATCTTTTA AAATGCCAGT ATAAATTTA ACATGTGCAA CTGaAATTC GCTTAATTGT	240

55

TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTGTGTAT TTTATCACAT TTAAATCACT 360  
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAAACT TTTGCTTTAT TTTTATAAAA 420  
 5 AGCTCTTTCA ATAACCTGGT ATCATAAATA ATTATTTTTG AACTCATAAC AGTGAATTCG 480  
 ATGCTTCTAA TTTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540  
 10 TCAAGAAACT TTATTAAATA ACAGGAAAAT GATATGTTTA AAATAATAAT GATGAAATAA 600  
 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

## (2) INFORMATION FOR SEQ ID NO: 1176:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60  
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120  
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180  
 AAAACTTTGC AGCATGTCGC GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240  
 30 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAAGG TGATGAAATT GCTAAAGTAG 300  
 tGAAGCTTgA AAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360  
 35 ATTAGACACA ATAGTAAAgG CGAtAGCGAT TaAAGAAAGT TAAGTCAGTC 410

## (2) INFORMATION FOR SEQ ID NO: 1177:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATAACTA TACTTACACT 60  
 50 ATTGATGGCA CAAGGTAAC ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120  
 TAAACCAAGA TAATGGCTAC TACAGC 146

## (2) INFORMATION FOR SEQ ID NO: 1178:

(A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10	TGTTCCCTGGT GGAACTTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTCAAT	60
	GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG	120
	CAATTAATAA TGTACTATCC GTATTTATAT CTATATCGTG GTnATATAAT ATGTCATCAA	180
15	CTGGATnTAC GTCAATAGAC CTTGTAACC TTAATATCGC GACAT	225

(2) INFORMATION FOR SEQ ID NO: 1179:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

	TGTACGCATA TGGTATCACT TGATGACCAA TTCACTTTGT CGAGAATAAC GTTATTTAAA	60
30	GACATTGATT TAAAGAATTG GTATTnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG	120
	ACAACAATGA TTTTCATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT	180
	TGACCTGGCC TTTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA	240
35	ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC	300
	TGTGACTGTG GCTGACATC	319

(2) INFORMATION FOR SEQ ID NO: 1180:

40

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50	TTTTATCTTG GTTTTGAAC AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA	60
	AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTTCGTCT TTATACTCAA	120
	CTGCATAAGT ATTTTACCG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT	180

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TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300  
 TTTCAAGTAA CGACGTACTT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360  
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420  
 AAAAATTCCT CCTAAGAATG TTTGTyTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480  
 AGTATATATC GATAAATTCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTGGT 540  
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAAATTA GTGAATAAC ACTAAAATTT 600  
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

(2) INFORMATION FOR SEQ ID NO: 1181:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

25 CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTAAAC TAACTTGTTA AATGTTGCTG 60  
 TATTTTGTGA TTCAACACTG TAATATAGTT CTTCTGACGC TGATGCATTA CTCATTGTAA 120  
 TAGATATTAA AAGACTCAAT ATTATTaaAC TAATAATAGC GCGCTTTATG ATTTTCATAT 180  
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TGCGACAACA T 231

(2) INFORMATION FOR SEQ ID NO: 1182:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60  
 45 AACTTAGTAC ATTTAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120  
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180  
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240  
 50 CGGGA 245

(2) INFORMATION FOR SEQ ID NO: 1183:

(A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

10	AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA	60
	TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA	120
	CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC	180
15	GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTAAAA GAAAATGAAA AGCAATATCA	240
	ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA	300
	ATATTTTTAT ATTACATATT TATCAAGAAA TTTAAAAGAA TATAGAAAAT ATTACGAACC	360
20	ATTGATACAT AATCAATGAT AAAGAGTTTA AAGAAGGTAT GCAACGAGCT AGAAnAGAGC	420
	TAAACTATnC TGCTAATACA AATACTGTAG CAACGTGTGT TAGTACGAAT GATGAAAGGA	480
25	ATAGAAAAGA	490

(2) INFORMATION FOR SEQ ID NO: 1184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

	CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGCATAC GAATTAGAAT AACTCGCGAG	60
	ACCTATAAGT CTCTTTCCTC ACTAGATAGT TTATACTTTT GGTCnGTTGA AGTCAATAAT	120
40	TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC	153

(2) INFORMATION FOR SEQ ID NO: 1185:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

	TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTG GTTAGTGCCT	60
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AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

## (2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 143 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGGTTTGCGA TACGTTCTGT CTAAGAAATA 60  
 GCGACGTGCA ATTCATATT TTTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120  
 TTGAACCAGG GTCTATACTT TCT 143

## (2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60  
 TGGTTGTATA TGCACTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120  
 TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCTG TTTATTAGCT CAGCATGAnC 180  
 ATACAGTTCG GTCACATAGT GTCAATTCA 209

## (2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60  
 ACCGTGGCAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120  
 ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

## (2) INFORMATION FOR SEQ ID NO: 1189:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 527 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

CACCAGGCAT TACCATACCA GCACTCATAC CACCAATCAC KCTCGATAAC ATCAATACCG 60  
 AAAAATTGTG GCCAACTGCA AACATAAATT CTGACACTGA AAACAAAATT AATCCTATAC 120  
 ATATAATTAA TTTCTTCCCT AATTTGTCAG CTAGCGTACC ACCAAACGGC GATATAATCA 180  
 TTTGAGATAA CGCAAAAGCA GCAACTAGTA ATCCTAAATC ACTACCAGTT AATCCCAAAT 240  
 CTTTTAAATA AACAGGCAAG ACTGGTATTA CTAAACCGaT ACCTAAAAAA ATCAAGAAAA 300  
 TATTAATAA TAAGACAAAA ATCTGTTTAT TCATATGCTC ACCTCTTTTT TCTCCATGTC 360  
 ATGCTTAAAG CTGTTATTCT TCTTTCCAC GACAGATTGC AATTCATGCT AAATATTCGT 420  
 AAAAGTTTC TATATTGTAT TACAACATTG CTACATTTGA CAATATTTTt TCTTTGTAAT 480  
 TATCACTATn TTCCATTAA TTGTATAATT AATGACATAT TnnAATA 527

## (2) INFORMATION FOR SEQ ID NO: 1190:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 889 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

AAAACGTGGC AGTAATTCAG TGTATGTTCA ATATGATGAT ATTATGTTTT TTGAATCATC 60  
 AACAAAATCT CACAGACTCA TTGCCCATTT AGATAACCGT CAAATTGAAT TTTATGGTAA 120  
 TTTAAAAGAA CTGAGTCAAT TAGATGATCG TTTCTTTAGA TGTCAATAA GCTTTGTCGT 180  
 CAATCGCCAT AATATTGAAT CTATAGATTC GAAAGAGCGA ATTGTCTATT TTAAAAATAA 240  
 AGAACACTGC TATGCATCGG TGaGAAACGT TAAAAAATA TAATAAGATA ATAAAGTCAG 300  
 TTAACGGCGT ATTCAATTGT AAATCTTGTT GGATTTTAAAC AAGATAACTA GCAAATGCAC 360  
 TGTATAGCTG GCTTTTTTAAT TTTATTAACA AAATTAAATA TGACGCGTGA ATTAAAAAAT 420

CTCTACAATC CTATGGCGCA ATTTTAAACA AATATACTA AATtTGAAAT TGACAGTTTC 540  
 CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTTA AAAACAGTG 600  
 5 TAGCACAAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660  
 TTCAACCTCT TGTAATGTTG GCAAACCTATT AATAGCACCA TACTTCGTTG TCACTATTGC 720  
 AGCAACGCGA TTGCTAAACG CTAAAATTTT CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780  
 10 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840  
 CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

(2) INFORMATION FOR SEQ ID NO: 1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60  
 TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAAATGC GTTCTCAATT AGGCGTGATA 120  
 TGGCTTTAAA GATTTnAGTC TGTTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180  
 30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTAAACAGAT TTGTAACATC TATGGTCTAA 240  
 nGATACGGGG TTAA 254

(2) INFORMATION FOR SEQ ID NO: 1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60  
 TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120  
 GCTGTGTATn CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTTC GCTGAATGAT 180  
 50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:



(A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

10 TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAAACTG ACCAATGAAT GAAAAAATGG 60  
 GCAATGTTTT TGACAACAAT GGTCATTTAC CAAATAAAAA TATTGnCACc ATTAATACCT 120  
 GnCAAACGTG TTTGTTCTTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGTT 180  
 15 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

## (2) INFORMATION FOR SEQ ID NO: 1194:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTTGCh ACTGGTTTAC CAACGCATCT ATGTTCCGGTC GCTATACCGC ATACAGATGT 60  
 30 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120  
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

## (2) INFORMATION FOR SEQ ID NO: 1195:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 180 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

45 ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GgnTTCTTGG 60  
 TCTAATAGTC CTCTTGCTCC TGCCTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120  
 CGGTTCAATCA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

50

## (2) INFORMATION FOR SEQ ID NO: 1196:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60  
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTTAC TTAATCAATT TGGaAAAGCC 120  
 AAGATTTATT TAGTTAATAC ACGTGTTCa AGAaTTTmTG AGGgCAAATG TAAATCGATT 180  
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240  
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

## (2) INFORMATION FOR SEQ ID NO: 1197:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTCCCAAT AATAATAACA ATACATAACT GATATTAGCT 60  
 GTCTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTATTTTTT TTGTGTCAAA 120  
 nAATTTTTAT TTTATCTCTC CATCGCATTa ATTG 154

## (2) INFORMATION FOR SEQ ID NO: 1198:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 249 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

40 AATCCTCACC CGTAATAAAC TCGTTTTGAA TCGGTTGTTT GAACTCACGG TATATTAAAG 60  
 CAATATCCTC TAACTTATTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120  
 45 CTAAATGTTT AGGCGTTACT GCATATTTTT TAAATCTTG AATTGTTCT GTTAATTTTT 180  
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTGTTCnT 240  
 GAACAATGn 249

## (2) INFORMATION FOR SEQ ID NO: 1199:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGGTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTTAAAACCG 60  
AAGTTGTGCA TTAATTGTAA AGTTCAAACCT CTTTCATCTTC ATAGATCGCG ATGCGTCTTT 120  
TAATTCTTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA 165

(2) INFORMATION FOR SEQ ID NO: 1200:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

TTATTAGCGA TTA AAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT 60  
CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTCGA TGGAGTTCAA AACTATTTTA 120  
ATGCATTACA TGTGTGTAGT nAAGAGCAGG CGTACTTTTC TTTTCAAGGA TGTGACATAT 180  
CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG 236

(2) INFORMATION FOR SEQ ID NO: 1201:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 146 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA 60  
CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA 120  
AATGGTAAAG GCAAAGCTAT GGGCTT 146

(2) INFORMATION FOR SEQ ID NO: 1202:

50

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 385 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA 60  
 5 GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG 120  
 TCATTTTCGTA CTTGATTAAA CTTTGTGTGA ATTGCTTTAG TACCTTCTAA ATACCTGGTT 180  
 GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA 240  
 10 TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC 300  
 TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC 360  
 15 GTCCATGCGC ATCnTnACCC ATTCA 385

## (2) INFORMATION FOR SEQ ID NO: 1203:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 580 base pairs  
 20 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA 60  
 TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAAC GAAAAATTGG AAAAAGAAAA 120  
 30 TATAAACTA AAAAACAAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA 180  
 AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA 240  
 35 TAAGCTTTAA CGGGTTTGAA TTTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCAGTA 300  
 TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG 360  
 AACTATATAT TGCGACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA 420  
 40 CAGATGAACA GGACAACTA ATTAACCTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA 480  
 ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAGA CGACCGATTC AAAGTAACTG 540  
 ATCTAGACAG TGCTAACTGG GTTTTTTnAG AAACnGGAT 580

## (2) INFORMATION FOR SEQ ID NO: 1204:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 139 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATCGTATGGT TGAGGCGAAT TTAAGTAAA AATTAGACAA CGAATCTTGA TGAAAAGAnA 60  
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120  
 5 GGTTCATCTA CATTGGAGC 139

## (2) INFORMATION FOR SEQ ID NO: 1205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60  
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120  
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180  
 TGAACCGGTT GCAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

## (2) INFORMATION FOR SEQ ID NO: 1206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

TCGACAAGTT TTTAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTTT TTAGCTACAA 60  
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTTAT 120  
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180  
 TAGGTATTTT AGAGGATGCA TTAGAACCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240  
 ATTAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTTAACTGc GATGaGCCCCA 300  
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360  
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTT 399

## (2) INFORMATION FOR SEQ ID NO: 1207:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAACAATA CGATTTGTAT GCTACTTGTC TGAAGACAAC ATAAACAAT ATGTTAACTG 60  
 5 ATATTGAGGA TATGGGCTTT CAAAATCCAn TTCAAAAAG GTTATGTTGA AATATGACGC 120  
 GGTGTTGAA AGAGACCC 138

## (2) INFORMATION FOR SEQ ID NO: 1208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 655 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

AGTCGCCTAA CTTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60  
 TTTTGTATT CTTGGCGTAT TTTTGTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120  
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTA-TAT TTTGTTGCA 180  
 25 ATTGCCTTAT CAGCATTAAAT CGTATTTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240  
 TTTTGATGAT CATTAGTGTA GAAAATAGCT GTTTnATATT GAGGACCACG GTCTTGATAT 300  
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360  
 30 GAGAATAATG CAACATCATA TTGAATTTCA ACAGTTTCTA AATGACCACT CGTACCTGAT 420  
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGTCGCCCCA TATATCCAGA AGTTACTTTT 480  
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540  
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTTCCATTA GACCTTAGTA CGATTTATTA 600  
 AGAAATCACT TGCTTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

## (2) INFORMATION FOR SEQ ID NO: 1209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

CCGnCCCCAA TGGAAATTAC CTTTGGTnCC CCATTTTAAT TGTTAAATTA TTGGAGTGTT 60

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAAACA GCTTCTTCAG CTTGGTTATT 180

AAACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213

(2) INFORMATION FOR SEQ ID NO: 1210:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:

TTGATTGCAA CTTTGATAGT GAAAACATTT ACATGATGTT GTCACTGGTG CACGGGCGTC 60

GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120

ACTACACGAA ACCCAATAGC nTCACCAGG 149

(2) INFORMATION FOR SEQ ID NO: 1211:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:

AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAATA GGATAATAAA TCCAGCGACA 60

TCCCAAATGG GATTCAATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120

TTCTATTATA AAATTGGGCA AA 142

(2) INFORMATION FOR SEQ ID NO: 1212:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:

TTTAAATTTA GTCACCTCAC CTTTTAAAGC ATGTTTATAA AATGTTTGCA TCATCAATGC 60

ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120

TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 765 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG 60  
 CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTTCATG 120  
 TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG 180  
 AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA 240  
 ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC 300  
 GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG 360  
 CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAAATAGTA 420  
 CAATGGAGCC AATTTACCTA GACAATGTTG CTGTAATTGG GaaAGTAATT GGTtTGtACC 480  
 GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTTAT 540  
 AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA 600  
 TTCAGTTCAA ACAGAAATTG CGAATTGTTA GATAATCTCA TTCTTTAaTA TAAATnTTGA 660  
 ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAAACTCG CCCCCGTAAT AATTTACAGG 720  
 AGCGAGCCAT TATTATTTTT TTnTTCTTT TTTATTAAGT ATATC 765

## (2) INFORMATION FOR SEQ ID NO: 1214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

AGTTGCCATC AAAAATACAG AACCTAATna TnACCTTTTA TGATTTTTTG TGAATTCAAA 60  
 GTCACTTTCT TTTnAAGCT TTAAATTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG 120  
 AATATCAATG CCTTCTTTCA TTAAAAATTC TCTAATTTTC GAAACAAATA ATAATGCATG 180  
 TTCTCCATCA CCATGCACAC AAATTGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT 240  
 TGAAATAACT TTATyyyCct TCACCATCTT TAAACCTGC TTAAGTGCTT CGTCAGTATC 300



ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420  
 TGAATTTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480  
 5 AACGTTTGCh ATTnC 495

## (2) INFORMATION FOR SEQ ID NO: 1215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AnTGTCCAGG TACCGTGGT CCAAATTTCG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60  
 20 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120  
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180  
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTCAATTGA ATAGGTTTGC TGTGACTCGC 240  
 25 CGA . 243

## (2) INFORMATION FOR SEQ ID NO: 1216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60  
 40 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120  
 TTTATTAATT CGATTAGTTC GAACTACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180  
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240  
 45 AATGCTCAAG CGCAnG 256

## (2) INFORMATION FOR SEQ ID NO: 1217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

5 TTTATTTTTT CTTCTAAACG AAACATTGCT TCTTTTGTG ATTGTTTTGT ATTCTTGTC 60  
 AACACAACAC TTACGCGCTT CCATTTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT 120  
 CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTTCAA TCCACATGTT TATACCTCCT 180  
 10 GAGAGAACGT ACGTTCTGTA AATTTGTAAA AAATAATAAG GGTAGGTGGG CTACCCAAAA 240  
 TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA 300  
 ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTTAC ATACCATATA AATATCTAAC 360  
 15 AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT 400

## (2) INFORMATION FOR SEQ ID NO: 1218:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

CCAAGTGTC ATTTTAGATG ATTTTTTTGT TGACCTATCG CCTTAACTGA AGAACTGAT 60  
 30 AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTC CGAAGGCTT AAACGATTCA 120  
 TATCACGAAT ATTTTAAATC GTTATATCAT TTTCTGTAA TAATACATCT ACTTGCTTTA 180  
 CGGGATCTAA CGAAGTTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA 240  
 35 ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAATT 300  
 TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTTGA TCAATTGATC 360  
 40 TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT 400

## (2) INFORMATION FOR SEQ ID NO: 1219:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 458 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

50 AAGATATTAG ACATAAAATC TAAAnACAGC AGTAAGATGA TTTATGATTA GAAACTATCT 60  
 TACTGCTGTT CACTTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA 120  
 55

GCATTCATTT CTTGTcTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240  
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300  
 5 TTACTCATTT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360  
 TTTTCACTTC GCCAAGCCAT TTTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420  
 10 AAAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

## (2) INFORMATION FOR SEQ ID NO: 1220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTGTAAA GTACAATATA AGTTAAATGT TGTGTGTTAGG ATTGATTCTT 60  
 25 TCATCTGAGC ATTTAATTGT AAGTCGCTAT ATTTAATTGT TTCAGTATTT AmAAATAAAT 120  
 TGAAAAATTC AACTGATAAT AAAGGTGTTT TAATCATACA AATACTTGAC GGTTGCTAAA 180  
 TAGTGTTTCAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240  
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAAACTAC CAGTCTTAGC ACAACCAGGA 300  
 GTACATAAAC TATGACTTGT AATACGTTTCG TCACCTGCTG AATCATTTGA GThATTGTTT 360  
 GCTTTAACTT GCACGTCTAA ATCAAGAACT TTTCCATAG ATAAACCTC CTATTATTAG 420  
 35 TTGAAGTTAA GGCCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480  
 TTATATAATT ATAT 494

## (2) INFORMATION FOR SEQ ID NO: 1221:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

ACTATTATTT TAATAGTGAC GACAGTTTTA ATTTATTAA GTATTGCTTT AATTACCTTT 60  
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120  
 55 AGTTCACTGG TCGAACAATC ACATAATA 148

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT	60
TATAAAAATG AGGAATTTTT TGATTGTTTA ATTCACTTGC TAATTGATTA GCTTTTTGTT	120
GGTCTTTAAT TGTAACGTCG TGTGGTGCAG TATATTTTAT TTCAC TTGAT AAGGACGCTC	180
TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG	240
TAAGTGAAAA AGCATTTTTC TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT	300
TtACACTTAT AACACCTTkt CTAACctTCT TCACCATTTT AAAAAGTAGA GArACAGAGC	360
TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAhAA A	401

(2) INFORMATION FOR SEQ ID NO: 1223:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

CTTGACCAAA TCcATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA	60
AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGatATTACT GATTtCCCAT CATTGTnTAG	120
CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG	176

(2) INFORMATION FOR SEQ ID NO: 1224:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

AATACTTTTA CGATAATTAT AAAGGTTTCA TCAAATCTTA GGGCAAAATG TATAATATTT	60
TTATGCAAAT TTAAAACanT AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT	120

AATGCCAATC AAACCTCGCTC GAAATAGGGG GAAACGAGGC nATCATT TTTT GACAATGAGT 240  
 GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

(2) INFORMATION FOR SEQ ID NO: 1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAGAGGT 60  
 TAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGACACAAC CATTAGTAAA 120  
 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCACG TGAATnACGT CAGGATGTCn 180  
 GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

(2) INFORMATION FOR SEQ ID NO: 1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

TGGGTACTAT TTATTACGTA AAAC TTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60  
 TTACAAAAGC GGACTAGGTT TGCACTTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120  
 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTTGTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60  
 GGTGGAAGTT TAATCAAAAG TAAAAATTTA AGCACGTTAT TAAAACCACT ACATCAAACC 120

GCGGCCGTTT TAATTTTGGT TTCAAGTTAA TCATACTTAC ATATAAAAAT GAAAAGTTGA 240  
 ATTTTITAGTA CAATTTCCAC TGTATTTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300  
 5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360  
 TCCTTGTAAG AGTGTGTTTG TAGTATCATA AATATGTAAA 400

(2) INFORMATION FOR SEQ ID NO: 1228:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

ATCTAGCATG CTTTGGGAAA ACGATAAGAA TTTGGTGTIT GAATTTTCATA ACCAACACCA 60  
 GCAGTTTCAA CAACTACGTG TGTAGGATAT AAATGTGTTA CTTGACCTTT GACATACGCG 120  
 25 TACATTATAG GCACATCCTT ACATACTCAN 150

(2) INFORMATION FOR SEQ ID NO: 1229:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

TCGGTACAGT GCATTTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60  
 TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120  
 40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60  
 55

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180

CA 182

(2) INFORMATION FOR SEQ ID NO: 1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTTAAA TTGTACACAA TTCTGGATAA CTATCCCAT TTCTGTGGAT AAACACCTTG 60

ATGTCTTATT ACTTATCCTC GTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120

TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180

ATTTTAGCTA GcNTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

(2) INFORMATION FOR SEQ ID NO: 1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

GTTTTTGGTA AAAGTACTAA TATTaACCAa GTATTGAGTC ATATGTtAAA ACAAGATGCG 60

AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120

TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180

ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCTTTCTCT 240

AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300

GATAATGAAA CGTTACGAGA CAATAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360

ATTGnTAGCC CAATGGnCCC TTAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60  
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTTGTG AAAATGAACG 120  
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAACG GTAAAAATCC TGAAGTGAAG 180

## (2) INFORMATION FOR SEQ ID NO: 1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

20 ACCATTTTAA TTTnChTTAT GACCTTGTAT GCCATTATCA aCAGTTATGA TTAATGTTAT 60  
 GCyTTCATCA TGAGCATTTT TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAAGCGG 120  
 25 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAATTTGTA 180  
 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTGCT 240  
 ATCGCTCTTT TAATTCCTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300  
 30 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGTn CATCAATAAT CGATTTACTT 360  
 nCTAATATTT TTTTACGAT TGGCGTTAAC TTAAATTTTG ATGTTAATTC ATCACTTATG 420  
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

## (2) INFORMATION FOR SEQ ID NO: 1235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

45 CGTGATTAAG TTGATACTA AAATTTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60  
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120  
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

## (2) INFORMATION FOR SEQ ID NO: 1236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs  
 55



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

	GTTAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC	60
10	ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAACAA TAACTGGAAT ACTTnGATTT	120
	AATCCCGCTA TAACATTTCC TAAT	144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

25	ATAGTTTAAG GTGATATTCA AACAATATTA GGTtTGATTT AACTATCAAG CATCTACTTT	60
	GTCATGTTTA ATACCAGCAA ATAATAAAAT CCATGTCACG ATAATAAATG GCATGTTAAT	120
	GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC	180
30	GGTTAATTAA CCACCCCCAA AAAA	204

(2) INFORMATION FOR SEQ ID NO: 1238:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

	CGGTCATTTT GGTTATTnAA CAACTATACC TGAGGGGTGG TGGGTAATTC GTATTGCCGA	60
45	TTCAGTTTtG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA	120
	TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT	157

(2) INFORMATION FOR SEQ ID NO: 1239:

50

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60  
 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120  
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTT ATTT 164

## (2) INFORMATION FOR SEQ ID NO: 1240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

TTGAAAACT GAAAACGGTG AAGTTTACA AACAACTAAA ACAGATAAAG ATGGTAAATA 60  
 TCAATTTACT GGATTAGAAA ATGGAACCTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120  
 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180  
 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

## (2) INFORMATION FOR SEQ ID NO: 1241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGGAAT CATAATTTCT ACCATGAGTC 60  
 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TnCAAGTTT 120  
 AAAATAATTT GCGGTGTTGG CATTGAGTA TC 152

## (2) INFORMATION FOR SEQ ID NO: 1242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120  
 GCAACTCTAA CTCATTATA TTAACTA 148

(2) INFORMATION FOR SEQ ID NO: 1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60  
 TGAATATCGT GAATTAGTAT TAAAAGCAAT TCACATGATT ATGCTTGGTT TCTTGTATAA 120  
 ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180  
 TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATACAGC TTATATTTAT TCTTTGACTT 240  
 TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300  
 AAACCTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAAGAT TTCTGGAATA GATGGCATAT 360  
 GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420  
 TAAAAAATTA TTGAAGAGTC AATTTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480  
 CATAATGGGG ATTTGGGCAT GGAACGAAG TGTAATACCA TTGGTTTAAAG GGGTTAAACC 540  
 ATGGCCAGCC TTGGTTAAAG GGTAnGGnCC AATAAGGACG GTGGGCGG 588

(2) INFORMATION FOR SEQ ID NO: 1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60  
 AATTTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120  
 TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTTATTG TTTTAATTGA AAAGCAACAT 180  
 AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240  
 GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTTCTT ATGAATTTTA TTAAGAAAAT 300

GTTATATGTh ACAAAA

376

## (2) INFORMATION FOR SEQ ID NO: 1245:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 288 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

CAATTGTTC TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT 60  
 TTCGGTCAAC ACCTTTTTTC GTTAATGGCT TGTTCAATTG GGTAACCAT GTGGTTATCC 120  
 CCCAACCTGG GTACCGTATG GGGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTAA 180  
 TAAACCGGTA nCAAATTAAA AGGTCCTTTT TTAAAAAATT TTTGGTTTCC AAAGGGGCCA 240  
 ATGGnTCCCC CAATTAATGG TTAAAGGTTT TAACCCCAAT TTTCCGGC 288

## (2) INFORMATION FOR SEQ ID NO: 1246:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 161 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTTAAACGAC GAGAACAAAG 60  
 CAAGTCGACA TCAGTAAAC ATTAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT 120  
 TTTATAAATC TATACnTCC AAAATGTAAA ACTACCAAAA T 161

## (2) INFORMATION FOR SEQ ID NO: 1247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 421 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA 60  
 AACTTAATTC AAGTGTTTTA GTCATGAATA TGTCTCCTG ATTAAATTGA TAAAGATTTG 120

TTAATTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240  
 TGTITGCCGT TAGCGTctAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300  
 5 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGCTAAT 360  
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAn 420  
 10 G 421

## (2) INFORMATION FOR SEQ ID NO: 1248:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAAATTTT 60  
 ATTCTTCTAT AAAAACACCT CTTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120  
 25 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180  
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGTATA AATAGACGAT 240  
 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300  
 TTAACCATCA TTCGTTGTCA AAGTTTGGAA ATgATGTTG TTTTTTATTG TTAAATTA 360  
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAAC TTCA 409

## (2) INFORMATION FOR SEQ ID NO: 1249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTAGCAA 60  
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAAACTG TTTATCCAAC ATTCCAGAC 120  
 50 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180  
 TCATTGCAGG TATATTGATG AATCACAAG TTGGTAT 217

## (2) INFORMATION FOR SEQ ID NO: 1250:

(A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60  
 GGCAGTGCAC TAAGTATATT CATTGATCCT GCATTACAC GATGAAAGCA TTTATTGCAT 120  
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15

(2) INFORMATION FOR SEQ ID NO: 1251:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25

TTTCAACTTT CTAAATTATA ATATATCTTT TTAAAATAAG CTAGAATTTTC TATATAATAA 60  
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTTGA 120  
 30 TATTGCGAGT TAGTTTATAT GGTTTGGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180  
 AAGCATGGTA TAGTGCAATT nAAAAnCTGT GT 212

(2) INFORMATION FOR SEQ ID NO: 1252:

35

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60  
 AGTTCATAAT CAAAGATTTA TAAATGThTC AGACTGCCAA TATAACATTT AGGACCTAGA 120  
 ACATTGATTA T 131

50

(2) INFORMATION FOR SEQ ID NO: 1253:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60  
 ACGTCATCAT TTAGAAACAG cAATGAATAC CCTGAmATTG TATTTGTTGG TAATCACTTA 120  
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTTAGCAG ACAAAGATTT CTCTGTAAAC 180  
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTTAGATT GTTCAAACAA 240  
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAAC GTATATTTGC AACAAACGGAT 300  
 AAAGAAAAAG GnGCTTTAAA ACAGTTGGCT ACAAACGAAG GTTATGAAAC GTTTATCGTA 360  
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420  
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

## (2) INFORMATION FOR SEQ ID NO: 1254:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAAACTTC ATATACTATA GTTTCCTTTT 60  
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120  
 TCTTTTCAA ATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180  
 35 AGGTAGTAGG TAATAAATAT AAGACTTAAA GTTAAGATTG CTTTTTTCAT GTTTCATAAT 240  
 TAAAACCTCT GTAAATTTAA GGTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300  
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360  
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

## (2) INFORMATION FOR SEQ ID NO: 1255:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

5      nAATCTATGT ATGGGGGCAT CCAAAGATTT CATAGACTAC TTATTTGTTG ATGAAGCCGG      120  
 ACAAGCAATC CTCAAGC      137

(2) INFORMATION FOR SEQ ID NO: 1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:

15      TGAAATGTAG AAATTGAATT AGAAATGAAG ATTAAAAATC nACACGTATC GTTCAAGTGG      60  
 TGCAGGTGGT CAGCCGTAAA CACAACTGAC TCTGCGTACG TATTACCATT TCCACTGGTG      120  
 20      TCATTGCAAC ATCTTCTGA      139

(2) INFORMATION FOR SEQ ID NO: 1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:

30      TTACCAntTA TTTTAACACC ATGTTTAGAC CAATTGATC TGAATAAATT AATCGCTGTT      60  
 35      TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC      120  
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTGCGAA ATTGTGAAGT CGTTGTA      177

(2) INFORMATION FOR SEQ ID NO: 1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:

50      AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT      60  
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG      120  
 TATCACTTAG GTGTATCAAA CTGACCAAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC      180



TTAATTTTTC

250

## (2) INFORMATION FOR SEQ ID NO: 1259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

ACATTTACGG GACATTTTCAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60  
 ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTTAACC AAA 120  
 TAATGAAACA ATAAAAACA TTATATCGTT ACTTATTAAG TAATTTGGCA 170

## (2) INFORMATION FOR SEQ ID NO: 1260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTA CTCC GATACGTTGT ATTCAGGTTG ATGACACTAG GAATTTGTAA TGATCAATTT 60  
 CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTGTGG ATAGACATTC ATATCATTGT 120  
 CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180  
 TGAGACACAT GTTGCGTGAC TGnGGATTTA TCAnATAATC TCAATCACGT GATCCnATCA 240  
 CATTCA TCAG CTCACTAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GGCGTACCGC 300  
 CAGTG TCCGC ACG 313

## (2) INFORMATION FOR SEQ ID NO: 1261:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180  
 GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60  
 TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120  
 CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60  
 AACCGAACTA ATAATCACAG CAAAAATAAA ATTAAAAATG CTCTAATAGT GCCTACATnC 120  
 TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATT GGTTTTAnGC GCTATTTAGA ATAGCCATCA GATAAAATCA 60  
 TTATTTAAAC GTATAATAGG TCAAAATATA GAGAGTTACT ATACAAATTT CTAACTTTCA 120  
 CTTAAAATAA AATATATATA ATTAAACTGG AGGAGAAGG 159

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG 60  
 ATTAATTAAT AAAAAGCTTA TTGCAAATA TGTTTTTCGG TAACTGTAAT TTAGTGATT 120  
 TATCATTAAAC AG 132

## (2) INFORMATION FOR SEQ ID NO: 1266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

CATGGATTTA TCTTAGCGAT TGGTCTAATT TTACCTTTAG GTGCACAAA TGTATTTATT 60  
 TTTAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC 120  
 GGGTTGTCAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG 180  
 TCTTTACCTG TACTTCAWGC AWTATTTTAT ATAGTTGGTT TAATTTTCTT GATGTATATG 240  
 GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAACCTCAAAT TATGTCTCCA 300  
 ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT 360  
 ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GCnGC 405

## (2) INFORMATION FOR SEQ ID NO: 1267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

TCTTTATATT GCAGTACAAA ATTCGCGTGG AGGTTTAAACA CAAGTAGACC GCACAAGATT 60  
 TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GtTATCGTTC AAACACCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTTGTAC TTGTATCGCC ATCAACAGTA 60  
 ATCATATTAA ATGTATGGTC AGTCGAAGAT TTTAATAATT GATGAAGTGT ATTTCGATTCA 120  
 ATCGATGCAT CGTGTATATAA AAGCAAGCAT GTAGCCAATT GCGAATCAAC CCGAnCTTGG 180  
 CACACATGTA CGTTACACAT TAGAACnCAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240  
 CAAGCGC 247

## (2) INFORMATION FOR SEQ ID NO: 1269:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60  
 GGGGTTGGGA AAAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120  
 TTTAAAGTGA GCAGCGCAGG GTCAGTCATC TCTCACAGnA CCTAAAAAGA ACAGTAAGCn 180  
 CAACCTAAAG CAGTGGAACT TAAATCATC AAGGT 215

## (2) INFORMATION FOR SEQ ID NO: 1270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60  
 TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT nGAGTGAAAG GCCCAGCAG 119

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GCGGATTTGC 60  
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120  
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180  
 TCATCTTGAA CGTACGAGCC TAATCGCCCh GCGCGATCCT GCC 223

## (2) INFORMATION FOR SEQ ID NO: 1272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60  
 TCTTCAGCAT GCTCCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

## (2) INFORMATION FOR SEQ ID NO: 1273:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60  
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120  
 TTAACA 126

## (2) INFORMATION FOR SEQ ID NO: 1274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGGCGTA GGTGCAAAGG CATCAGGTTT 60  
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAATGA GAAATCACAC TCAGTTAATG 120  
 CATGTACTAG C 131

## (2) INFORMATION FOR SEQ ID NO: 1275:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

TGGAGTATTA CCTCAAGTGA ATACAACATA CCTGTTGGAA GATTTTTC AA AACTTTAATT 60  
 20 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120  
 GATACTAATT TGGCCTGGCG CACGCTTTAG TAnTAGTGG 159

## (2) INFORMATION FOR SEQ ID NO: 1276:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTTGTTTTT 60  
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120  
 40 TTGCTTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGTATTT CAATATCATC 180  
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTG AAGTAATAAT 240  
 TTTsATAGTG CCATTATGAT TTTyycTGAA TAACTAAATC ATCTTTATCT AGTTTTAACT 300  
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360  
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420  
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTTCG ATTATCTTCT TTAAATTTT 480  
 50 CAATAATTGA CCAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTTCATCTA 540

## (2) INFORMATION FOR SEQ ID NO: 1277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAAnTAAG GTAATAGTTA CCAAGTACCA TATCTTGTGG ATGGTGTACT ACAGGTTTAC 60  
 CATCTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120  
 GCCTCTTTTG A 131

## (2) INFORMATION FOR SEQ ID NO: 1278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60  
 TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120  
 TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATnA 166

## (2) INFORMATION FOR SEQ ID NO: 1279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60  
 AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120  
 ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180  
 ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240  
 TGTTTATTAA CAGAGGCACG AATTTTTTAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300

ATTCAATTTAT AAAAATAGAG GAGTATTTAT TCTTGTTGAT CCATATnTAA TAGAGAAT 418

(2) INFORMATION FOR SEQ ID NO: 1280:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT 60  
 TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA 120  
 ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA 180  
 CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT 240  
 TCATATTTTG AAACATCAAA GCCGCTTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA 300  
 TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC 360  
 TTATCTAATA ACACATCAAT ATACTTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT 420  
 AGTACGAGTC CATTTTGAGA ATAACTTT 449

(2) INFORMATION FOR SEQ ID NO: 1281:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 289 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA 60  
 ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA 120  
 ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT 180  
 TTGGTGTTCA ACAATTTAAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT 240  
 TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT 289

(2) INFORMATION FOR SEQ ID NO: 1282:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTCAGGTCG AGGTGGCCCG GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60  
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120  
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAAGAGCC GCGAGCGATC 180  
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240  
 GCATCCCGAT GCCGCCGGA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300  
 CTTCTTTACC TTCTACATAG CGCGTGAGCA GAACcATCTT GATGgCACAG CTAAATAATG 360  
 15 CaATgGGAAT GATGTATGAC ATTCGGGGTG CATAATTTCT CT 402

## (2) INFORMATION FOR SEQ ID NO: 1283:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

25 TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60  
 GCGGTGGACT ATTGTTGCGA CTGGACACCC GAGATATTGC TCAGCAnAGC ATCATATACA 120  
 30 GGAAGTATTA AAAGAGACTT GnCGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180  
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

## (2) INFORMATION FOR SEQ ID NO: 1284:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

45 CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60  
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGTGA 120  
 50 ATCAATTAAG TCTGCCAAAG AAAAGA 146

## (2) INFORMATION FOR SEQ ID NO: 1285:

(A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

10 ATTTGCGGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60  
 AGCCCTCCAT TTCATGATTT GATTGGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120  
 GGGGAnATAC GAACCTC 137

15 (2) INFORMATION FOR SEQ ID NO: 1286:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 594 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

25

GCTATTGATT ATGGTTAGCm TGTGTTTCwC TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60  
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATT 120  
 30 TTATGATTAT AAAGCTGGTA TGGATGAAC TCGTCGATTT AATCAAATTA ATCATTATCG 180  
 AGATAATTTG ATGGCTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240  
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300  
 35 AGTTCTAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360  
 AGTTTTAATG GTCTTAACTT TATTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420  
 TAAAGCGGAT ACTGACCAAG CATTGCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480  
 40 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540  
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGTnTTG TCGGATATTn ATTT 594

45

(2) INFORMATION FOR SEQ ID NO: 1287:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

55

TGAAGTAGTA ATAAACCCGG AACCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120  
 5 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCCAATGGAG GTCCAACCA TCCAAACCCC 180  
 ATTCGCTAA TGnCTATGGG TCCAATTAG GAATCCAATG GATGGATGGA TTh 233

## (2) INFORMATION FOR SEQ ID NO: 1288:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60  
 20 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGAAGA AACGCAAACA 120  
 TGGTGCGTCA CG 132

## (2) INFORMATION FOR SEQ ID NO: 1289:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

35 TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTCAT GATACATAAA 60  
 CATTGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTTGCCGTTA CAACACCATT 120  
 ACGGTTATAC ACTThTAGCC AATCATTATC TGGG 154

## (2) INFORMATION FOR SEQ ID NO: 1290:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

50 AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTCTGAT AAATCATAAC CTATATACAT 60  
 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1291:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTTGATA CCATTTTCATC GTCTTCTCTT GATTTCTAAA 60  
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120  
 ATATTGTATT AACAAATGAG TAAAGCTGTG TATTAAGTCA TCTTTCTTCG ATGCAATGGT 180  
 AGTTAATGAT TTTACACGAT AAGCATATTT ATCTGTAAAT AACTTAGCAA CTACCCACC 240  
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTAA 300  
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTGA GAAGACTTGC CATGACCTCT 360

## (2) INFORMATION FOR SEQ ID NO: 1292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60  
 AACGnTGAGT ACACAAAATA CAAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120  
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

## (2) INFORMATION FOR SEQ ID NO: 1293:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60  
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

## (2) INFORMATION FOR SEQ ID NO: 1294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTTATAT ACCCTCTTAT 60  
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTATAGTG CAGCCTACAC 120  
 TTCGTGATTG GGCAnTAGTT CTAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGGTTAA 180  
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

## (2) INFORMATION FOR SEQ ID NO: 1295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATTGCCAG TGAGACTTGT ATCATATAGT 60  
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCCAAGTTT CAGATGGCAC ACAGATGAAA 120  
 TGTCTCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

## (2) INFORMATION FOR SEQ ID NO: 1296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTAAACGC TTCGAAATGT TTTAGTAAC TAATTTTGCC 60  
 ATAATCCCAA AAACCTCCTG ATTATTAAGT GChTTTTGAT TGGCTACATT AAGGCTTTAT 120  
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180  
 TAACATCAAC GCTTACnGGA GTTTCAG 207

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

ATGGCATCGG TTGGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA 60  
 TACCTGGAAC CTTTGGTGCC TACCACCAAT TGGTAACGGT TTTACCATCG GATTTTtagT 120  
 GATACAGCGA TATGTTTTGT ACAGG 145

## (2) INFORMATION FOR SEQ ID NO: 1298:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

TCCAAAAGTT AAAGGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA 60  
 AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT 120  
 TCAAGCGTTG AATTGTGGT 139

## (2) INFORMATION FOR SEQ ID NO: 1299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA 60  
 CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTAAATT 120  
 GTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT 180  
 AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA 240  
 TTTTACATCT TCGAAATGTA GTTTTGAAG AACTTTTGTA TGTATATCTT TAGCACTTCC 300  
 AAAATTTATT GGCAGGTAA TTTAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG 360

## (2) INFORMATION FOR SEQ ID NO: 1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

CTACAGTGCA ATTTAACCAT GAAGTTGTTG ATTTTGAACA ATTATCAAAT GGTCAATGGG 60  
 AAGTTACTGT TAAAAATCGC CTAACGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT 120  
 TCATCGGTGC TGGCGGTGGA GCAATTCCAT TATTACAAA AACAGGTATC CCTGAAAGTA 180  
 AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCAAGTTA 240  
 TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG 300  
 TACCTCATT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATTT GGACCATTG 360  
 CTAATGTTGG ACCTAAATTC TTGAAAATG GTTCTAATT AGATTATTC AAGTCTGTTA 420  
 AAACATACAA CATTACAACT TTATTAGCAG CAGCAGTnAA AACTTACCT TTAATTAAAT 480  
 ACTCATTTGA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT 540  
 ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA 600  
 TCAAAGATAC ACCTGAACAC GGTAAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT 660  
 CACAAGACCA CACTGnAATT GCATTATTAG GTG 693

## (2) INFORMATION FOR SEQ ID NO: 1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

CATACTTGGG TAATGCTGCC CATGGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT 60  
 GTGnATGTAT ATAAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAAACTTAAA 120  
 ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTTAACCTAG GACCTGAACC 180  
 AGAATTCTTC TTGTTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA 240  
 TGGTGGATAT TTCGATTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT 300

TCAACATGAA A<sub>1</sub>TGACTT<sub>a</sub>A ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420  
 TTTAAATTGG TTGTTAAAAAC AATCGCACGT AAACATAATT TACACGCAAC A 471

(2) INFORMATION FOR SEQ ID NO: 1302:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTITGGATT 60  
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTAACTAA 120  
 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTTG 180  
 TACTCACAAA CTAGTTT<sub>r</sub>AA ATTCTAACTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240  
 ATAAACCAAT GAAGCAATCA GAAAACACTC TAATTTTCT<sub>a</sub> TTAGAAATTT G<sub>n</sub>TTTAATAT 300  
 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACCGTCAATTTT TGTTTAATAT 360  
 GCTTGGTGAT CT<sub>n</sub>TTATTCT GCGTAATAAT GCTAAACCTG 400

(2) INFORMATION FOR SEQ ID NO: 1303:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

AAAAGCTTAG TTGAACTTTC AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60  
 AAAAGACTGG GGTAAACT<sub>n</sub>C GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120  
 ACAACATC 128

(2) INFORMATION FOR SEQ ID NO: 1304:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTCTT CCACTTTTGT 60  
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTCTT 120  
 5 GCACCATACA TTAGTGACTT G 141

## (2) INFORMATION FOR SEQ ID NO: 1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GACTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAATTAA 60  
 20 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAANT 120  
 AGAGTAGAAT GATGGTGAGG TCGATTTTAG TAGACTCTGG AC 162

## (2) INFORMATION FOR SEQ ID NO: 1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACATA TAATTTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60  
 TCTAAAGGTG CCATAAATTT AAAAATAATA GTAGTTGTTT TAAATTTAGT TGTGTTGTA 120  
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTAATCAAAT ATATAGCCTC CTCTATATCT 180  
 40 TCTTACATCT ATATTTTCTT AGTGATTTTA AATTGAACTA AGCTATTTTTT CATATAATTT 240  
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

## (2) INFORMATION FOR SEQ ID NO: 1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

AAGGAAAAAA CCCTTGGCCT TTGGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAAAA 120  
 AAGTTTAACC CGGTTGGCCC CAATTCCCGC CCGGGAACC CAAAAGGAnT TTTAAAAAG 180  
 5 GAAACCCAAT TCCCGGCCGG AAAAGGGTTT TTAAGCCCAA CCGGATTTTA AGGAAAACCA 240  
 TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

## (2) INFORMATION FOR SEQ ID NO: 1308:

## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 692 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

TGTATTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60  
 TCATATTCCA GAAATGTAT ATGACAATCT AGTAAAACT GTACATAAAT ATTTACCATT 120  
 GCTACATAGA TATACTGAAT TGCGCAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180  
 25 TGATTTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240  
 AGAGTGGATG TTTAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300  
 AGGCTTAAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAAACGTT CAGGTGGCTA 360  
 30 TTCATCAGGT GCACATTTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTT 420  
 AGACTTATAC ACATTAGTTC ATGAATTTGG GcATTCaGCA CATAGTTAcT TCaGTAGAAa 480  
 35 ATTCCaACCG TCaATTCTa GTGACTACaC TATTTTGTG GcTGAAGTTG CaTCAACTTG 540  
 TAACGAAGCA CTTTTAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600  
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTCCG 660  
 40 AGAATTTGAG CATAAnATTc ATGCAATTGA AG 692

## (2) INFORMATION FOR SEQ ID NO: 1309:

## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTcG ATGATAGCTT TTTTGACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

TGTGCATTG ATAATATTCA CTATGATTG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60  
 CTAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

CACCCAACTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60  
 CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCh TGTTCATTTT TAAGAAAATC 120  
 AATAGAAGTG TATCGATTAA AACTACATT T GAACCATTAC TTG 164

(2) INFORMATION FOR SEQ ID NO: 1312:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60  
 TTAAATAGGC GGCTTTATTC GGGTGTTATT GTATGTAAAG TGAAAAATTT AAnCCCATT T 120  
 CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

	AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA nTCCAGAGGA TTACAATTAT	60
10	TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT	120
	TATATGTATC GGT	133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 629 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

25	TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC	60
	CATTTACACC AGGTTTAAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG	120
	TGATTGAAGA GCATTTGCTT ACAGAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT	180
30	CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT	240
	TGTCAATAAA ACAAACTACT TCTCAAATCG tATTGATTTA GAACAAGTAT TACaAACTAA	300
	TGGAAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC	360
35	AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTTA AATCAGCATG TAGATAACGC	420
	AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTTATCA TCTGCAAAAG GCACACAAGA	480
	TATTAATGAT ATGTTGGATA CTTTTTTCAA TGAGAAAGGT AAGTTAATTG GTATGTTGCA	540
40	AATGTTTATG ACAAAGAGA GTATTGCAGA TCGATTCAA CAAGAACTTA TACGTTTAAC	600
	ATCTCATCCT AAAGCAAGAA CAATTGTGA	629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

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ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT 120  
 CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAATGG TCGTGAAAAC TATGATGCAA 180  
 5 CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT 240  
 ACGTACGTAT TGATAGAACA CGTAAACTAC CATTAAACAGT ATTGTTACGT GCATTAGGGT 300  
 TCTCAAGCGA CCCAAGAAAT TGTGTACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT 360  
 10 ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA 399

## (2) INFORMATION FOR SEQ ID NO: 1316:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 778 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

ATAAACATTT TAAnATGTAA TtnAGAAATT TTTTtagTAC AAAATCTTTC TTAATAATGA 60  
 25 TTAAGGAGGT CAGTAATGAT TGAAATTAAA ACATTAACGA ATAATGATT TAATGAGTAT 120  
 AAGAGACTTG TTTCGACAGT CAATGAAGAA TTCACTCAAG ATTACATTA TAGTCAAACA 180  
 ATGACTGACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT 240  
 30 GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT 300  
 GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT 360  
 AATAGCGAGC TCATTAATTT CATTATTAAT TATGCACGGC AGAACAATTA CGAATCTTTA 420  
 35 CTTACATCAA TTGTGTCAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC 480  
 GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT 540  
 40 TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTIA TATATTCTAC rTTTCTCATA 600  
 AATTCAAATC ATATAGGTTT TATTTTTCAT ACAACTACTC TACTATTGAG TAGTTGTTTT 660  
 TTATTTGATA TGATAACAAT AAGTTTTTTT CAGAATATTC TATGTTTTAG GGGTGTCAA 720  
 45 ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATChTAA GCGATTGGGT CCTAAnTT 778

## (2) INFORMATION FOR SEQ ID NO: 1317:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

5 TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AAACAAAATA AGAAGTTAAA 60  
 AGGTGTGGCA TCTGCCGCAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120  
 TGGTGTACT TAAAACTAAG ATATCCATTT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180  
 10 TCAGCATATA TTGCTTTCTT CAAGGTAAAA GCAATCGCAT TAGGAACTGC TGGATTGCCA 240  
 GgATTtATTT CAATCAATCC AGTACATGCA GgATGGTTAC ACTaCTTTGT TGGTATGACA 300  
 ATATCATTcA TCATTGcTAT AACAGTTACT TTAAtTTTAT CtAaaAGAAa AGCAAATAAA 360  
 15 GAAGTTGTAG AATAAAAAA GAGGTATGAC AGTAATCAAA GTATCAGTCA TTGCAATGC 420  
 AATAGGATGA AACTTTAAGC TGTCATACCT TThAATTTAG TTATA 465

## (2) INFORMATION FOR SEQ ID NO: 1318:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

30 GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAAGAA AATAGCATTG 60  
 CATAATACCC AAGCAATAAA TACTATAATA TTTTGGAAGT AACTAATCAA ACATCTAAGA 120  
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

## (2) INFORMATION FOR SEQ ID NO: 1319:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

45 CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAT TTAATATCAT TATTACTTAT 60  
 TTCTTATCTT TATThTCTTT TTTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120  
 AATCCCCAAA T 131

## (2) INFORMATION FOR SEQ ID NO: 1320:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60  
GTTTGTACAA TATTTAAATA TCAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120  
ACCATTAATA AACGGAAAGA 140.

(2) INFORMATION FOR SEQ ID NO: 1321:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60  
CTTTGAAAGT GAATGATnCT TTTAAAATAA AGAAGATAAT ATAAAGTGCT TGATAATGGA 120  
TTTGTAGTTG ATGATTTAAA 140

30

(2) INFORMATION FOR SEQ ID NO: 1322:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 185 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60  
TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120  
ATACTAAAGT GTTCTGCACC TTGCCTGTCT CCTTCAAnTT TCGATTACTG TAGAGCACAA 180  
GTACG 185

40

(2) INFORMATION FOR SEQ ID NO: 1323:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

5 ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60  
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120  
 GTTGGTGGTA TGGTGCGGTA nTTGGTTT 148

## (2) INFORMATION FOR SEQ ID NO: 1324:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

20 GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60  
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120  
 25 TTAnGCTCCC TAGTGGATGA A 141

## (2) INFORMATION FOR SEQ ID NO: 1325:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

35 TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60  
 40 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120  
 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAAGACG GTAATATGAT TAAATGGTCA 180  
 CGACAAAAAG ATTCTTTCTA TTAT 204

## (2) INFORMATION FOR SEQ ID NO: 1326:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:



TTTGTTAAAA GTCTTCATTT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120  
 AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATTaATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60  
 AGTAAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120  
 TGACGCTCAA ATAGTTTAAC TTTGATCGGA GCTTTTTTTAT AATGTATACC GAAAGGTTCA 180  
 AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240  
 TTAATCCTAA TAATATAGAA TTAATCATTG GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300  
 CAGAATTGTC TGAAGTGCAC TGAGCGGTGCG ATCTAATGTA GGTAAGTCTA CATTTATCCa 360  
 ATAGTATGAT TGGCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420  
 CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTGTG GGATGTTCCA GGGTATGGAT 480  
 ATGCTAAAGT AAGTAAACA CAACGTGAAA AATTTGGGAA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60  
 TATCTTGACT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATna 120  
 ATAGATGCGA ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

5 TGTAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60  
 CTGCAATGAT ACCTGAAGCA TGAAGTTCTT CTGnTAAAAA GTATACGACA AAAGG 115

## (2) INFORMATION FOR SEQ ID NO: 1330:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

20 AACAAAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTTG 60  
 CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

## (2) INFORMATION FOR SEQ ID NO: 1331:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

30 TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60  
 35 TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGA AAATTAACTT AAGTTAGAAT 120  
 CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAAGAAC GTCACGACTT TATGATGATG 180  
 ACTGAACCCA GTTTTTACGG AAG 203

## (2) INFORMATION FOR SEQ ID NO: 1332:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

50 ATGATGTACT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CCTCATTTTA ATCACCTTTT 60

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180  
 TTTAWTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAACCTTGT AACGTAAGAG 240  
 5 AATGAAAAAT AAGCTGnATA TGTTGTTTG 269

## (2) INFORMATION FOR SEQ ID NO: 1333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTTGGCATTC 60  
 20 TTGGAATTTG AACAAATCC TGTTCATTTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120  
 ATCAAAGTAA TGTCCTTTTT TG 142

## (2) INFORMATION FOR SEQ ID NO: 1334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGAATAACA CATGACAAAT 60  
 35 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTTCATC TTGATCTTGC 120  
 ATCCTTGCTT TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180  
 40 TTTACAACGC TGTTCATAC CTGGAATAA G 211

## (2) INFORMATION FOR SEQ ID NO: 1335:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60

TCCGCTCGC

129

## (2) INFORMATION FOR SEQ ID NO: 1336:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 633 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15	CATGATGGCn TCTTACCAAA GGCGATTTTA AGAGCAATGA TACCAAGATA TTTTAAATAC	60
	TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACCTT GTTAAAAATC AAGTTCTTAC	120
	CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC	180
20	CTACTCTCAA AAGATGAAAT TATATATACA TATTTAAATA TAGTCCCTC GGTAGAGATT	240
	ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC	300
	CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG	360
25	GCTATACACC CTACGAAAAA GATGGAACGT TAAAATCGGA TAAAGATTG AAATATAGTA	420
	TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAG	480
	AATACAACGA CGCATTAAAA TATGATATTA AATCACATTT GTTAAATCGA AAAAAGCGTT	540
30	AATTGATGCT CACTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AAACAGCAGT	600
	AAGATTATTT TCAATTAGAA AATTTCTCAC TGC	633

## (2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45	ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA	60
	CTTTTTCCTA TACTACAAGG ACCTTTACTT TAAAACAACG AATTACAAA ATAAAAGGCA	120
	TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTAAAAAT CGTTCCTGTA	180
50	ATTTAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA	240
	ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAA AGTCATAGGT	300

## (2) INFORMATION FOR SEQ ID NO: 1338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAACATC TCTTACATCT 60  
 TCGCTTGGAA GTTCTTCATA GTCGAATTC ATTGTTTAT CAAAGTTTTC CATTGCGAC 120  
 ACTCC 125

## (2) INFORMATION FOR SEQ ID NO: 1339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60  
 CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGAATATGC TTCATATCAT T 111

## (2) INFORMATION FOR SEQ ID NO: 1340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTAACAC CATGTTTAGC CAATTTGTCT 60  
 GCTAAATTAA TCGTGTTTGT CCTCCAAATT GACACGCACC TTTAGTTTTT CTAAATAATG 120  
 ATATCATCAC ATCTCTCAGT TAAAGGTCAA AATATTG 158

## (2) INFORMATION FOR SEQ ID NO: 1341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTCGC AAACAAGAGC 60  
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120  
 GTAAAACAAT TATTAGCATA CAAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180  
 10 TAAGGAGGAA TTTTTTATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240  
 AAAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATAATTAT ACAAAGTAGC 300  
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTCCGT GACCGTCGTC AACGTAAACG 360  
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

## (2) INFORMATION FOR SEQ ID NO: 1342:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

25 GTTGAACAAG GGCAACAAAA ATTTGAGCG AAACAGATTT TTGAATGGTT ATATCAAAAA 60  
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120  
 GATAACTTTA CTGTTACAAC TTTAACAAC GTAGTAAAC AAGAAAGTAA AGACGGTACA 180  
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AACTGTTTT AATGAGACAT 240  
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300  
 TGTGCTTCTA CACTTGGCGG CTTAAAAAGA AACCTTGAAG CTGGCGAAAT TGTTTCACAA 360  
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

## (2) INFORMATION FOR SEQ ID NO: 1343:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

50 GAAAATTTCA TCAGGTGTTG GCgTGGAACG TACATTCCCA TTACACACAC CAAAATTGA 60

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180  
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACITTTA TGGAGTGATA 240  
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCTT 300  
 CTCTATTCAT AACGTGTTTG CTCAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360  
 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTAA 399

## (2) INFORMATION FOR SEQ ID NO: 1344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCAATA 60  
 TCTAGGCCTT TAGGTTGCCA TAGTACGAGA TGTAGAGGTA CTAGAGGAAT GAGTGTCGCT 120  
 25 AAAGTTGTCTG TCGT 134

## (2) INFORMATION FOR SEQ ID NO: 1345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60  
 40 GCACAATAGA TGATCGCAAG TCGATCATC ACACAGTACT GAAGCAAGA 109

## (2) INFORMATION FOR SEQ ID NO: 1346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG AACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTG TTTGCATAAG 60

## (2) INFORMATION FOR SEQ ID NO: 1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAC 60  
 ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120  
 AnTG 124

## (2) INFORMATION FOR SEQ ID NO: 1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60  
 GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTAA 120  
 CCCCCTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180  
 TAAACGTTTC TTCTAAATTT AATAAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240  
 AAaTgAtATAT TaTTCATATT CACTTCTnAT TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300  
 ATGCnTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

## (2) INFORMATION FOR SEQ ID NO: 1349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTTGTTGGA CATCATTAAT ACCTGTAATT 60  
 TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120



## (2) INFORMATION FOR SEQ ID NO: 1350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTTT ATCGTCCCAC TCTTCAATCC 60  
 ATTTTATAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTcTTTATG 120  
 ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT 180  
 TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTtGcT TTAGCAACTC TTTCAACATC 240  
 ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGGTTTT AAAATTGAAG AATCTTTAGT 300  
 TATATCTGAA ACAGCAATTG GTTTGATTCC TAACTTTATA AAATCACCAA CATAAAATCC 360  
 AGTTAATACA GCAACTCTTT TAAGGTTCTC nGGGACTTT 399

## (2) INFORMATION FOR SEQ ID NO: 1351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTTGAAATT ATAGGTCATC 60  
 TCTGGTATTC TTGTACGATT CT'TTTCCAA TCTAAATCAA AGTTTTCAAT TTCTTCTTTT 120  
 GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT 180  
 GACCCTTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTAGTTACT CACTTGTGaa 240  
 ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATTT 300  
 GTTAATTCAA TCGCACGTTT CATAAATTGT GGTGTTAAAT AGTCAATAAC ATGATTTAAA 360  
 ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA 400

## (2) INFORMATION FOR SEQ ID NO: 1352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60  
 GGGCTGCAGG AATTCGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

## (2) INFORMATION FOR SEQ ID NO: 1353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

20 AGTTCAGGAG AGTTATAAAT ATTAGGGTGG TACATGCCCG AAATCATTGG AATTGTTAAA 60  
 GTAGATTTTA CAGTTTAGAG ATAACAGACA TGTCTATATG AAGGGCTGTC TACCCTCGTA 120  
 AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

## (2) INFORMATION FOR SEQ ID NO: 1354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTTGTAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTCAT CTTACATTTT 60  
 AGTTCCTTAT TTAAAAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120  
 CACAAAGTTC ACAAGAnAAT ACACTTTTGA AAATATTGG 159

## (2) INFORMATION FOR SEQ ID NO: 1355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

50 CGnCTTCCTT CAACCATTGT AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

## (2) INFORMATION FOR SEQ ID NO: 1356:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60  
 CAAATTATAG ATGTCAACAT GTTCTCTCGA CACCTACAAA AGATGCACAA 110

## (2) INFORMATION FOR SEQ ID NO: 1357:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60  
 ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120  
 GTTGAAGATA TCG 133

## (2) INFORMATION FOR SEQ ID NO: 1358:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60  
 ATATATCAAA ATCATTAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120  
 GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTTAGATTTT GATCATATAG 180  
 ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240  
 TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300  
 GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAACTA TTTAATGAAA TTTCCAAATA 360

## (2) INFORMATION FOR SEQ ID NO: 1359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTTTAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTTGTGTTT GAAGCGGTTA 60  
 ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTCG TGAAATGACA TTTGTAACT 120  
 CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180  
 CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240  
 CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAAC TnTAATTGGC nGGCTTTTTT 300  
 GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360  
 TTTCCAAAAT TGCACCATAG GAATGGGTGG AT 392

## (2) INFORMATION FOR SEQ ID NO: 1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTTGT TTATTATCTG TCTCTACTAG 60  
 ACTGTAACT CCAACATATC TGTTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120  
 GATCTGAGGG CCAACTGGCA TGTTGTCAAC TTATGATATT 160

## (2) INFORMATION FOR SEQ ID NO: 1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAGTTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TCGGGAATGC 60

ATATTTATTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT 60  
 GTATCTGAAT TTTTAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG 120  
 TGGCGACAGT GTACGTATCA GACTTAG 147

(2) INFORMATION FOR SEQ ID NO: 1363:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA 60  
 ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA 108

(2) INFORMATION FOR SEQ ID NO: 1364:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTTGGTACC GCGAATTGAA TAATTTAAAA 60  
 CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTAT AAATTTTGA CCTCTTGAA 120  
 AAGTTACGTT TTCAAGAGGT TTTATTTATC CTA 153

(2) INFORMATION FOR SEQ ID NO: 1365:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

TAAGAGAATT ATATGCATTC CAAACGAAAC AACAGAAAA ACGGACCAAA CTAAGTGTCA	60
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA ACACTTACGT ACACACAAAA	120
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAAACTACTT	180
ACGT	184

15

(2) INFORMATION FOR SEQ ID NO: 1366:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

ACATTAGATG GGTCATCAT GTTATACAG GTGATTTAGG GGAGTCAATC AAATATAAAA	60
GGCCGGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT	120
CATTAAATTAT TACTTATATT ATCTCATTTG CTTTAGGAAT AACGTCAGGT AGATATTCTT	180
ACAGTTTGAC GGATTATACT GTGCAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT	240
TTATTGCGGG AGTATTTGCA ATTTnTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC	300
AAGGTTCTGT TGATATTAAC CTAAAGAAG GTACTTTTGA ATATtATATG AGTAAAATAT	360
ATCACACATT TTTACCTGCA TTCACTTTAG GTTTATTATC TACTGCTGGT TATAwTCAAT	420
ATTTACGTAA TGaTATTATT GAAAATTCTA AA	452

40

(2) INFORMATION FOR SEQ ID NO: 1367:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

TTGTGAGTAA TTGACAATA TAAGTGTG TGCTGGATGG CATATCCTTG GTACGACCTG	60
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC	120

55

## (2) INFORMATION FOR SEQ ID NO: 1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60  
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CGGTATCAAA TCATTCTATn 120  
 ACTTAG 126

## (2) INFORMATION FOR SEQ ID NO: 1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTACAC ACACAGGGCA CATACGGGTT GTGTTTAGGT 60  
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120  
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

## (2) INFORMATION FOR SEQ ID NO: 1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60  
 ACCAATGACA CGTCAATTGC TAATGACTAT TTTAATAAAC CGGCAAAGTA CATTAAGAAA 120  
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGGAATGACT 180  
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACACTG CCAAAGATGA ACGCACTTCT 240  
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300

AATGGACCA~~n~~ CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

## (2) INFORMATION FOR SEQ ID NO: 1371:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

CATCAAGAAC ATGTGAGACC ACAATTTGAA TCACTTGAAA AAATAAATAA AGACATTGTT 60  
 GGATGGATAA AATTATCAGG AACATCATT AATTATCCAG TACTACAAGG TAAGACAAAT 120  
 CACGATTATT TAAATTTAGA TTTTGAGCGA GAACATCGAC GTAAAGGTAG TATTTT~~y~~ATG 180  
 GATTTTAGAA ATGAATTGAA GAATTT~~n~~AAT CATAATACTA TTTTATACGG GCACCATGTC 240  
 GGTGATAATA CGATGTTTGA TGTGTTAGAA GATTATTTAA AGCAATCGTT TTATGAAAAA 300  
 CACAAGATAA TTGA~~n~~TTTGG CAATAAATAT GGTAATCTCC ATTGC 345

## (2) INFORMATION FOR SEQ ID NO: 1372:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

TTGAAAAGCA GTTTGGATTT ATGCTCAAAC CATGGACGAC GGTTAGGTTT ATGAATGTTA 60  
 TTCCAAATAG GTTCATCTAT AAAA~~A~~CTAGT GGAAAGTGGA AAAA~~A~~T~~n~~AGT GGACCTTCGA 120  
 TAATACGATG TATTTATCGT TAGAAGCAGT AATA 154

## (2) INFORMATION FOR SEQ ID NO: 1373:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

GAGCCTAATT ATTCAAGCCA AATCGCATAT GAAATTGATA AAGAAGTTCA ACGAATCGTT 60



CTATACnAGA ACTATC

136

(2) INFORMATION FOR SEQ ID NO: 1374:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

15	ATCTTTAACA ATTAAAACCA TACTATCTTG AATCATCATC AAATTTAACG CATGTGCGTC	60
	AAGTTGTTTC ACTTTAAAGA CTTCAATTAT AAGACCGACC TTAGACTGCT TTTTAAAAAT	120
	AGGTACATTC GTAATCATAC CTATACTTTG ATTGTCTAAG TGTAATTTGT TTTGGTGATA	180
20	TCGATTATAA TCTTGTGCAG TAAAAGCTGT AATCATTACT GATTGTCTTG AAAATATCGC	240
	GCCTTCATTA CCAATGAAGT CTATTGGaAT aTCATCACTA GCCTGTTTTA ACTTGTAATA	300
	AGCACGATTC TnTTCTAAAG AAGCTCTAAA TAATGTCGTT TCATATACIT TGAAGTCT	358

(2) INFORMATION FOR SEQ ID NO: 1375:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

35	ATATTGTGTG CTAAATTTGC TTAAGTATGT TTTTGTGTTG nAAGTAAGCA TATGTTATTG	60
	TCITTTTAAT TGTTGTAAAA GTGCTGTTTT CATAGAATTA ATATCAGACA TCITTTATTAG	120
40	TA	122

(2) INFORMATION FOR SEQ ID NO: 1376:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

55	CATTTTCTTC GGTTTCTGTC TTTTATGCG TAGATTTATT TTCTTGTTCT TGGTTATTAC	60
----	--	----

CGATAATTAC GATGGTAATA AGAAGTTTTT TCAATATATA CGCCTCCATG TTAATGAAAA 180  
 GTAGTTGATA CGTGAAGCTA AATAATTnAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240  
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCATTGTt TTTTGTGTAC TTCAATTAGT 300  
 ATAACAAAAC TGTTATGTAT TTATAAATAT AATCATTAGT ATTTTATATG CTGAAAAAGT 360  
 TATAATAAAA GTGTAAGGAA TAAAATATTT GTATGGAAAA GAGAGATAAT TATGAATAAA 420  
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

## (2) INFORMATION FOR SEQ ID NO: 1377:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60  
 25 TTTATnAAAG TGTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120  
 GCTTGGGA 128

## (2) INFORMATION FOR SEQ ID NO: 1378:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

GGACGCTAGA GGATCCCGGT CTGAAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60  
 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120  
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180  
 45 AATGAACTTT AAAGGTTCTA TAKATGCTTA TCGTCAakCG GCAACTGAaG CAGGTTTCGA 240  
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300  
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360  
 50 TnGTTGGTTA TCCGAAACAG CAATnGCTAA TTCGTCAGTT 400

## (2) INFORMATION FOR SEQ ID NO: 1379:

(A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTTAACGAC CAACCTTAAa AaATACGCT CTTATGCATT GGATTAGTCC 60  
 TGATTATACA ATTTAACTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60  
 ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnT CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

40 TCATGAAAAC ATTTATTTTA AAATTTGATA TTTGTTCAAT AATATTCGAA ATTAACCTnT 60  
 GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

55 CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GnTGACTTAA GTAATTTAAA 60

GTTCCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTTCAAACAT 60

CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

CATTAAATA ACGTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60

TCTAATTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120

GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAATGTA AGCGCAATGG CCATTGTT 60

TTTCnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5 CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG 60  
 GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA 120  
 AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG 180  
 10 ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAAGTGGT AAAAGAATTT ATTAAACAG 240  
 TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA 300  
 TTAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAnA 360  
 15 TGTCAAATAA ACCACCTACT GTTGTATTGA TGTTGGTTT ACAAGGTGCT GGTAAAACAA 420  
 CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG 480  
 TTGCAGCAGA TATTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG 533  
 20

## (2) INFORMATION FOR SEQ ID NO: 1387:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

30 TTATTTACAA GCCATTAATA TATTTTAGGT TTGTTCTGCA TCGATTCATT GGTGCTATTT 60  
 TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG 112  
 35

## (2) INFORMATION FOR SEQ ID NO: 1388:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

45 ACACCTACAG TTAATAGTAT CAGTGCACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA 60  
 TGATGTATCh TCTTGCCCCA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC 118  
 50

## (2) INFORMATION FOR SEQ ID NO: 1389:

## (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 147 base pairs

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60  
10 TGCTGTTAAT GCAAGTACTG GAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120  
ACCTnCAATG GTACTTGTG GGAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 161 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

TTTTTGATCA TGATTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCTTCAACA 60  
25 ATTTGGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120  
AAACATGTGT TTAGATTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60  
40 CATTTTGGCC TCCTTATTTT TTGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

55

AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120  
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180  
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240  
 GCGAGTTTAG AACATTCTTA GCCGTCTTGT TAATGTTGTT ATTATTTATC TCGATTTCAT 300  
 TAGTTATCGC ATCAnCCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360  
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AACnCGCAAA GA 412

(2) INFORMATION FOR SEQ ID NO: 1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCAAnTGGA TTGCAATGAG TTTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTA 60  
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120  
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCAC GGACTGCACA 180  
 30 TACTGG 186

(2) INFORMATION FOR SEQ ID NO: 1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAAAGTC AACAAATTAC 60  
 45 GCGATATGAA AATTTGAATA ACAATTTGnA AAAGCATGCT TCCGATAATC AGCAAGCC 118

(2) INFORMATION FOR SEQ ID NO: 1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60  
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120  
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAA TTAATGGCCA TTGGG 175

(2) INFORMATION FOR SEQ ID NO: 1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAAACTTAG ACGATTAGTA TCATATATTA GAACACnGCA CCGAACTTGA AATCATGGCT 60  
 20 GATATCGCAC CTTGAAGAAG CAAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120  
 CTTACATGGC AT 132

(2) INFORMATION FOR SEQ ID NO: 1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGC GTTG 60  
 35 ATTTCTTACT TTAGGTGTAG GACAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120  
 T 121

(2) INFORMATION FOR SEQ ID NO: 1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

CGTTCGTATA ATCTCACTTG CATChTGAAT TGAACAACAT CCTGTCATTT TAAGACTGCT 60  
 50 AAAnGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120



AAACACCTCA TCCAAAGTTC AG

202

## (2) INFORMATION FOR SEQ ID NO: 1399:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTAA ATCTATCACA 60  
 GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120  
 TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

## (2) INFORMATION FOR SEQ ID NO: 1400:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60  
 GnCTTGGCGT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

## (2) INFORMATION FOR SEQ ID NO: 1401:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

TTTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60  
 TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

## (2) INFORMATION FOR SEQ ID NO: 1402:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60  
 ATACAATGTT GAGTAAATAA TGGCGATGCA GATGAATAAC TA 102

## (2) INFORMATION FOR SEQ ID NO: 1403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCAGTAGA TATAGCATTAA AACATATTTT 60  
 CATCCCCyTG AATTTTAAAA ACTTTTTCAG AAGCAACACC TCTAAAAATA AATaCAATAT 120  
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

## (2) INFORMATION FOR SEQ ID NO: 1404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60  
 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTTAT ATTTCT 106

## (2) INFORMATION FOR SEQ ID NO: 1405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTTCGA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCAGT GCTACTGCGA 60  
 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTCGA 120

EP 0 786 519 A2

CTTTAATAAG CAATTTGTAC TGA CTGTGCA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240  
 ATACTATnGG TGCGAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300  
 5 TCAGGAACC 309

(2) INFORMATION FOR SEQ ID NO: 1406:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTCAA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60  
 20 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120  
 ATGATTCTTC ATGGAAnGTA TAGG 144

(2) INFORMATION FOR SEQ ID NO: 1407:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60  
 35 TCAACnCGTT TCACTTGTAT AATTTGTTTT TGTAATTGGT GAAGTCATAG TATAG 115

(2) INFORMATION FOR SEQ ID NO: 1408:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60  
 50 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTAC ATTTT 115

(2) INFORMATION FOR SEQ ID NO: 1409:

(A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

10 AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60  
 TTCATGATGC ATTCGGTATG CCAATGACAA AGCAATATAA AGATAAATTn CAAGAAGATA 120  
 AAA 123

15

(2) INFORMATION FOR SEQ ID NO: 1410:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

25

CTnTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60  
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

30

(2) INFORMATION FOR SEQ ID NO: 1411:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

40

TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60

AGTTGGTAAA ATCAAATTTT GTACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120

45

GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCGGTTTT 180

TAATTTGCAT TTAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240

TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300

50

ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GnATATGCAA 360

ACAGTTATGA ATGAGAAATT AGCGAAATGG TTTGCTGAAA ATGATTACTT TTATAATCAT 420

GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTTGATTA CAATGAACTA AAGGCAAAAT 60  
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAAGT ATGGGGTCAA GTTTAGGG 118

## (2) INFORMATION FOR SEQ ID NO: 1413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGCC 60  
 CAnCCACTTG CTTGTTTGTA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120  
 AGTATGAATA TATATATCTA ATATTAAAC GGCAATATTT ATATGGTATA CATTTTTATA 180  
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240  
 GATGA 245

## (2) INFORMATION FOR SEQ ID NO: 1414:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60  
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120  
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180  
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240  
 CTACCTACCA GA 252

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AAAGTGGCTT TAGAAGGTCA AGATATAGAA 60  
 GATATTAAAT CTAAAAAGA AGGAACTTGA AAAAGTGATT CCAGGAATTT TC 112

(2) INFORMATION FOR SEQ ID NO: 1416:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60  
 ATAGCGCAAA TGCnATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120  
 GAAC 124

(2) INFORMATION FOR SEQ ID NO: 1417:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60  
 TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTITAGGTA GCGTCAATAT 120  
 T 121

(2) INFORMATION FOR SEQ ID NO: 1418:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60  
 5 GCAAATTAGG ACAAGTTGAT GAGTAACTAC ngCCAATATC GGTAAGTTTC ATGGCGGTTT 120  
 AGC 123

## (2) INFORMATION FOR SEQ ID NO: 1419:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

20 CTTATAATCC TTACnGCAAT TTCACCTTGT ACgGAATTAA ACAACGGAGG CATTACTTA 60  
 CCCCCTTTAC TTAATACGTA CCAAACTTG GTCGTATTCA ACCATTGGG 109

## (2) INFORMATION FOR SEQ ID NO: 1420:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

35 GCTGTnGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60  
 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATTT 120  
 A 121

## (2) INFORMATION FOR SEQ ID NO: 1421:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

50 TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTTAAT ACCATCGCAA 60  
 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAnATAT 120

## (2) INFORMATION FOR SEQ ID NO: 1422:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAAA TTTATCGAAT GATTTTCATT TGCCATGATC 60  
 AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

## (2) INFORMATION FOR SEQ ID NO: 1423:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60  
 ATACGTTGGT CACCGTGAAT AATTTACCA GCTGCATTTT TCCATGGACC A 111

## (2) INFORMATION FOR SEQ ID NO: 1424:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60  
 TTGATTTGAC CTTGCATATC TTTACATTC TTCGAAAATT GATCAAAGCA CTATTGAAAA 120  
 ACCGTATCAT ATACAAACCT CTAATTTTTT TGAATAACAA AAAGAATTCT TTGACGTATC 180  
 AACTATATCA TCATGACTTC 200

## (2) INFORMATION FOR SEQ ID NO: 1425:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 119 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

5 TTTCTATAAT TTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60  
 TAAAAATTTG GTCAATTAAC AAAGTTAGTT TGTAAAAACG TATACTTTAA TTATTCCGG 119

## (2) INFORMATION FOR SEQ ID NO: 1426:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

20 AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCGA CGGCAAAGAT AAATAAAGG 60  
 CACCTATTAT CGAACATAGT ACTCTTACG GACCTGGAAT TTAAATCAGA GCGGCC 116

## (2) INFORMATION FOR SEQ ID NO: 1427:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

35 TTTTATTTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60  
 TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120  
 TTATTCTTTA TTAAAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180  
 40 GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

## (2) INFORMATION FOR SEQ ID NO: 1428:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

50 GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180  
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240  
 5 TGACGnTTTT AACATCAATA ACTGG 265

(2) INFORMATION FOR SEQ ID NO: 1429:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAAAGCTAA AGAAGAACGT TTCCATGGAC 60  
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120  
 CACCAAAAAT TGACTTTTCA AGCAT 145

(2) INFORMATION FOR SEQ ID NO: 1430:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60  
 35 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTTTCAGnA TTAAGTGGAT AGGTA 115

(2) INFORMATION FOR SEQ ID NO: 1431:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTCGATTAT 60  
 50 CGCACGTCCA TAGTTGGTGA ACAGGAACCTT ACACGTACAT CTAATCGCAG ACTATGCGTA 120  
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

## (2) INFORMATION FOR SEQ ID NO: 1432:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTACTTAAAG ATTTCCGGTAT CGTGTCAATT GGCTCAGTCC 60  
 ATGTTTAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120  
 TTGGAACGTG GAGGACTTGA TCGTT 145

## (2) INFORMATION FOR SEQ ID NO: 1433:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGTTTTGG TATTTCTATT CATATACAAG 60  
 ACCATACCTT TAACTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTC AGAACCAATA 120  
 ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCn GATAACCTn 169

## (2) INFORMATION FOR SEQ ID NO: 1434:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCn TAAAAATCAC 60  
 TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

## (2) INFORMATION FOR SEQ ID NO: 1435:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

5 TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60  
 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

## (2) INFORMATION FOR SEQ ID NO: 1436:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60  
 20 AAnGAAAAGT TTAGATTCAC ACGCCATCAC AATGGATTAG AAAAACCGAA TTTCTTCAGC 120  
 AATTCTACAA TTTCTAGTAT ACGC 144

## (2) INFORMATION FOR SEQ ID NO: 1437:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

35 GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60  
 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

## (2) INFORMATION FOR SEQ ID NO: 1438:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

50 AAAGATGGTG ACATTTTATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60  
 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

AATTTAGAGT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240  
 AATTTCAAAC CTAAGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTC nTAAAGTGTG 300  
 5 CAAAATAATT TGTCGCTTTA G 321

## (2) INFORMATION FOR SEQ ID NO: 1439:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60  
 20 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120  
 GAAnGCCATT GCCAC 135

## (2) INFORMATION FOR SEQ ID NO: 1440:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTT ATTTCAACT TCTATTAAACC CTATTCAGTA 60  
 35 GGTTTGAAAT TAATACTATC AGAAAAATAC ACATTnCTT CTTTATTCT 110

## (2) INFORMATION FOR SEQ ID NO: 1441:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGChGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60  
 50 TGAATTTTGG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120  
 AATCCCATGT GTTTGATAAA CCACCGTAAA TATCACTACC AGGGAACACA AAACCTCTGT 180

GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTACTTCCAT GGGACGAGTT 300  
 AATATTTTAA ATTGTATATA ATACAAAaNA AGTnACGTAT TTAACCGCG GTTCCACCCA 360  
 AATTAGTGTA GTCACCTCGCT TTTATTTTAA AATGATTCGT TGCGCCAATC TTATTGTTAA 420  
 GCTTACACTA TCCTTA 436

(2) INFORMATION FOR SEQ ID NO: 1442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:

ATTTTtagAA GCATACTGCG AACGTCATCA CATCGATTTA CATATCAAAA AGTTAGATTT 60  
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GCTCGAATTA AACGTTACGA 120  
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCATTT 180  
 GGACGATCAA TTAGAACTA TTATGTATCG TATTTTTAnT GGGAAATCAA CACGTAATAA 240  
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300  
 TGTCTCTAAA AAAGAAATAr AACAATTCCA AGAGAGATAT CATATTCCAT ATTTGAAGA 360  
 TGAATChAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAAnAGAA TTATTCCAGC 420  
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTTATTA A 461

(2) INFORMATION FOR SEQ ID NO: 1443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 143 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:

AAAGGTGATA AAAAACAAG GCATTGTAAA TTACTTGAAA ACCAAGTGAG TTATTACAG 60  
 ATTCTAATTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120  
 GGGGGTTAGC GTGGAnTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 90 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

1743

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTCACAAGA CTTAGAAGTA TATGTACACA 60  
GAAATGAGAC TATATATCAT CAAGCATATA 90

(2) INFORMATION FOR SEQ ID NO: 1445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60  
CCTGACTTGC TGThAGATGT GCATTGCCTG TGACCACTTA ACTGCTGTTT GTACATTATG 120  
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTTAACATTA TGCTGCTAGA GCCATCTTTT 180  
AAAGATGTTT GGACTAACGT nCATGATGTG AATATCTG 218

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(2) INFORMATION FOR SEQ ID NO: 1446:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAACTA TGTTTTCAAA TTTATTTATT 60  
GTTACTGGGA ATTCACATT ATTAGATTTA TTTATTTTCT TTTGA 105

40

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(2) INFORMATION FOR SEQ ID NO: 1447:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:

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AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

(2) INFORMATION FOR SEQ ID NO: 1448:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAAC TGAAGAAATA GCAGTGCAAG CAGGATTGTT GATATGACAA CATTGAGTC 60  
 AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCACG TGCA 104

(2) INFORMATION FOR SEQ ID NO: 1449:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCACT 60  
 TTTTATCTTC ATATACATTA ATTAACCACC KTCAAACATT GTCGTTAGAT TCGCCAAATT 120  
 GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC 180  
 GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTTAT TAGAATAACC 240  
 CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAT GGCTGCTGGT TTTTtaggta 300  
 AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGCnAC GATAAAGCC 349

(2) INFORMATION FOR SEQ ID NO: 1450:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAATGATT GAATTTCTAG GAATTGAGTC 60  
 ATTAACAAAA CACTTGAAAA ATTCAGGTGG GATTGCGCTA TTGCCGGAAT TTATTGTTGC 120



AGAAACAACA TTGaTAATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTGTAAA 240  
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300  
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360  
 TAAGGnTAAT TCCAGGTTGA ATTCCAATTG CGGGCATCAT 400

(2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TGC GTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60  
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAAA 120  
 TnG 124

(2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

35 TGTATTAAAA ACCTTCCACC TTTAAAGCA ACAATGCGGT GTCCTTTAAA TTCAAACATA 60  
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120  
 40 TnATTT 126

(2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

50 ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180  
 TGTAAGAAAT TAAAATCTTT TGAAGCATT A GATTACTTA TCATTTnTAA ATTTCAATTT 240  
 5 AACTAACAG TAATTTATGT AGCTTTTGnA ATTCTCATAA 280

## (2) INFORMATION FOR SEQ ID NO: 1454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCITTA AATTAACTG ATCACTTGAA TAATTAACAT TACTTAATTC TATGGCATT 60  
 20 ATGATGATT CTCCTCATAA ATGAACGTTA AAATATCCTG CAGTTCCTCA AGTGACATTT 120  
 CGATGGCTTG CGCTTCATTA ACCAATTCIT TAACCAAATT TTCAATGGTA AAAAATTGTT 180  
 TCTCTTTTAA AATAGGAACT ATTCTTnGCT CCTTAACAAA GGnCCCTTTT CCTCTAATTG 240  
 25 TT 242

## (2) INFORMATION FOR SEQ ID NO: 1455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60  
 40 TTGATGTGAC AGATCAAGTG AGACTTGCAT AntGGTATTT TATTCAGATG 110

## (2) INFORMATION FOR SEQ ID NO: 1456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAGTGGTT GCCTTTTAA GTCCCGCGTG GGACAAAAT TAACCTCTTT ACACTTGCAA 60

AAAGCGCTTG CAATATATTT TCGATTGTt ATTCAACmAA ACGTTTTATT tTATTCGCTG 180  
 TAGTCAAATG TATACCCTTA TACTGACTCG aTAATCATTt GCTTATnATT TGAGAcTAGG 240  
 5 ACATAAATcA ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300  
 TGCACTTGTA ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTTTCGAA 360  
 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420  
 10 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCATATC CGTAAAATAA ACAACTAACT 480  
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540  
 15 AACCTAATTA A 551

## (2) INFORMATION FOR SEQ ID NO: 1457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATcNGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTcAGGA CTGACCAGCA 60  
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

## (2) INFORMATION FOR SEQ ID NO: 1458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60  
 45 TAGATTTAGn AATCCAAACT CATAACACCT CCACCATTC ATCACATCTG GA 112

## (2) INFORMATION FOR SEQ ID NO: 1459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CCCCAACCAA TTTTAA AAAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60  
 AACCCCAATT TTGGCCAATT TTAAAGGGAA GGCCTTGGAA CCTTTTGGG AATGGGCCGG 120  
 5 TTTTAAACCC TTGGTTTCCG GAAGGGGAAA ATTTTAA AAAACCGAAT TGGTTGGCCC 180  
 CCTTTAAATT AAAAGTTCC CTnAAAAAnA AATCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

20 TTTCGACAAT CAATTCGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60  
 ATAATAACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCACCA TAATAAATTn 120  
 CATATGTTCA TCACC 135

(2) INFORMATION FOR SEQ ID NO: 1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

35 TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60  
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

(2) INFORMATION FOR SEQ ID NO: 1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

50 GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAACG 60  
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTCGGACTT TGGTAAAATT GTGAACGCTG GnTGAATGAT TTTTGTTTGA 60  
 CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120  
 GTTCTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

## (2) INFORMATION FOR SEQ ID NO: 1464:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60  
 TAGTTTTGCA TTGCAAATT TTAAGTGAACC GGTTTAAACG AAT 103

## (2) INFORMATION FOR SEQ ID NO: 1465:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60  
 AAGTAGCGTG GAAAATATTG TATCTTTCTA AATGTACACG TTAGAAntCA TGCTTATGTA 120  
 TTACACGCGG GGCACTGGTA CCTAAGGGCC TAT 153

## (2) INFORMATION FOR SEQ ID NO: 1466:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTCATACA TTTTACTTTA 60  
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120  
 AACC 124

## (2) INFORMATION FOR SEQ ID NO: 1467:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

AAGGAATTAA GTTTGCACACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60  
 20 TAATTGAATA ACCGATATAT AAGAATATAC CTAATAAAC ACTGACAGTT ACTTGACCTT 120  
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180  
 25 GTTCACCTTT GAnAAATTTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240  
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300  
 30 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354

## (2) INFORMATION FOR SEQ ID NO: 1468:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

TGCAAACTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60  
 45 CACTCTATAA TATGAATTAG GGTTTACAGT TTTTIGAGTA TTTTACAGTA TCAAAGTTTA 120

## (2) INFORMATION FOR SEQ ID NO: 1469:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TCTAAATGCT GACTAAAACT AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA 60  
 GTGATTCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA 120  
 5 ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC 180  
 ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC 240  
 TTGCGAACTA AACCCATTTA ACTCACCTTT ACCTTTTTTAT AATTGAGACA CTAATGCTTC 300  
 10 AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCCGC 360  
 TTCTCCATT GCTAAGTCTG AACTGCACG AACTACAACA AATGGTACAT TAAATTGATA 420  
 15 ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTTG GAAATG 476

## (2) INFORMATION FOR SEQ ID NO: 1470:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

CACCATACAT GGGTAAGGAT ACTACTCAAA TCAACTTGAA ACCAATAATh CATGACCATA 60  
 TGTGTGCCAA TGAATTCAAT TGGAAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT 120  
 30 TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAT 156

## (2) INFORMATION FOR SEQ ID NO: 1471:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACTTAA AAAGCACTTT ATCAGAAAAA 60  
 45 GCTAAGAAAA AAGATTAATA TTCATTCATT AAATATAAAT CCAATTTAAT TTGTTGTTTA 120  
 AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG 180  
 AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA 240  
 50 AGTTCACCCT CTTCAATGAT TCTGTTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA 300  
 CCGTTGTTAT TAAACAACCT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA 360

## (2) INFORMATION FOR SEQ ID NO: 1472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG 60  
 TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

## (2) INFORMATION FOR SEQ ID NO: 1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAA ATCTATAACA CCGAGTTCTT 60  
 CCATTAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

## (2) INFORMATION FOR SEQ ID NO: 1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60  
 CGGAGCGATT GTATTGCATG AAGGTAACAT TGCGGAGTGC CAACAGGCGA AGTAAACTT 120  
 AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

## (2) INFORMATION FOR SEQ ID NO: 1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60  
 5 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAACATT CGCGCACAAA ATGAGCTCAG 120  
 GCGCCTGCCT TGCCCATTTT TTAAATTATT TCCCTGGAAA TGATTGCTG TGTGCTGTTC 180  
 10 TGTCCACAAC AACACGATTA ATGCCATGAC 210

## (2) INFORMATION FOR SEQ ID NO: 1476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

AGGGTGATT CACGGTTCGT CTGCCATTT AATTGCGCAT TTTGCACACC ATCTACCGTT 60  
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnt GCAAGTGCAT 120  
 25 GCTCTTTC 128

## (2) INFORMATION FOR SEQ ID NO: 1477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60  
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTGTTAC 120  
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTTAATACG 180  
 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTTCA ATATCGATTT TGGCACATAA 240  
 45 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCAGCCAT AATCTTCATT 300  
 AATTACAGCG TGATTCATCT ATTATTATGT TATAAAATkCT ATCTATAAAC GTCACCTTAT 360  
 TAAATAACTC ATGCACTTTA TTAAAAATCC TCACAAATTT GAATATACTT AATTTAAATC 420  
 50 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTGCTT GCAAAGACTC 480  
 AATTTCAATTT GAAATAGTTA AAGTAGAACC TATAThAAGC ATTTGTCTAG CTAAATTATA 540

GATAACTCTT ATCTTTTTCA ACTGTAGGTG ACCTTTAGGG C

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## (2) INFORMATION FOR SEQ ID NO: 1478:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATn CATGCTCTGT TATGGATGAC AAGACAAAGC 60  
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120  
 C 121

## (2) INFORMATION FOR SEQ ID NO: 1479:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60  
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120  
 CATAGCATTa TTn 133

## (2) INFORMATION FOR SEQ ID NO: 1480:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTTAAATTTT AAATTCCCn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60  
 CTTTTAAGGG GTGGGGGTTT TTTTAGGGAA AAAGGGGCCC GGGGTTAATG GTTCCCAAAA 120  
 AATTGGGGAA AATGGCCCCC CAAATTTTAA ATTCCCGGTT TAAAAATTGG GGTGGGTTAA 180  
 ATTGGAAAAA CCCCCAAATT T 201

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGA CTGAAAA TACGGCGTTA TTGGTGGTGC 60  
 ATTCACGGTA AATATGTTGC ATGACCAGCA AGTTTTGGnC TTCTGATGCA CC 112

(2) INFORMATION FOR SEQ ID NO: 1482:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAAGTGATC 60  
 TTCTGGTGTT TTA CTTTTTA TAAATGTTTT CATATATTC ATATGTATAA AAATGGGATT 120  
 TAGCGTA 127

(2) INFORMATION FOR SEQ ID NO: 1483:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 83 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60  
 ATTATATCTG CATGGGCGAT ACT 83

(2) INFORMATION FOR SEQ ID NO: 1484:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTGAA AATTTACAAC 60  
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTTAGTGGTC TATTGTGGGT TTATTGGTAT 120  
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180  
 CCAACCAAAA ACCAGGCCAA G 201

## (2) INFORMATION FOR SEQ ID NO: 1485:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

20 CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60  
 ACAAGTCGAT AAAGGAGCAC CATCATTAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120  
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180  
 25 TnCnCATGACA GAGTGAACCT CAACAGCGGT 210

## (2) INFORMATION FOR SEQ ID NO: 1486:

- 30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

35 CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60  
 40 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CCnACATGGA 120  
 ATGCAACCTA TGAATTGGAT GGAATTAGAT GAAGCGGG 158

## (2) INFORMATION FOR SEQ ID NO: 1487:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

114

(2) INFORMATION FOR SEQ ID NO: 1488:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT 60  
 TGGGAGATAT CGTTGTACCA CATGTTGATC AACTAACGTT nCCACATG 108

(2) INFORMATION FOR SEQ ID NO: 1489:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

CAAnACGTAA TTTCATGATG AAAGTGGTCG ATAATTTCTT GAAACATCGC TTTCAGTAAT 60  
 AACGCCTGCT TTAAGGTCAC GTTCCGCATA GGTGTACTGA GGATGTTGAT GT 112

(2) INFORMATION FOR SEQ ID NO: 1490:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC 60  
 TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG 120  
 AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTCGG TAGTGATGTT CACAATTTAT 180  
 ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCCGCA 240  
 GCGACGCCAt AGTTATTATG TCTAT 265

(2) INFORMATION FOR SEQ ID NO: 1491:

- (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

10 CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60  
 CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

## (2) INFORMATION FOR SEQ ID NO: 1492:

15

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

25 ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60  
 CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120  
 ACTCTCATT TGAAGAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACTGA 180  
 30 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTTGTCAT CTTGAATCAT 240  
 TGAAATGATC AATTTTCATGG CGnnAAAATG CCGTCT 276

## (2) INFORMATION FOR SEQ ID NO: 1493:

35

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1493:

45 GATGACGAGC GCCAATTATG TCACTTTTAT GGCAAAAGCT GGAAGTAAAC AACChAGCCT 60  
 GCCAGTAAAA TTGGCAATTG GGACGTTCTT AGCAGGTGCG TCATACATAC 110

## (2) INFORMATION FOR SEQ ID NO: 1494:

50

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

AAAAAAAGG TTTTTCACCC GGAATTCCAA AnTTTAAATC CCTTAAAAAA AATTCGGGCC 60  
 5 AACCCCCAAA CCCAAGGTTT TTTCTTAAC CTTGGAAnTA ACCAAGGTTT TTTTCCAAA 120  
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTTAAAGGTT TTAAATTGG GGGGGGAAAA 180  
 10 AGGCCCTTTT AGGGGGGGAA 200

## (2) INFORMATION FOR SEQ ID NO: 1495:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

AAAAAATTG GTGCATTTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60  
 TGTTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120  
 25 TTGGTGTCCG GGTGACAAGA CTTGGTGGCG CGGTGTAGTT TGTCAATTGT GTGGTCATCT 180  
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTTACTAAT TCTGCAAGTA 240  
 30 CACGTCACGC nnt 253

## (2) INFORMATION FOR SEQ ID NO: 1496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

ACGCTAGCTT CTGAAAAAAT AAGTGAAC TA TGGATGCAAT GAnCCTATTC CTGAATGATA 60  
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

## (2) INFORMATION FOR SEQ ID NO: 1497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATTa ATGAAAAGTT 60  
 GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

(2) INFORMATION FOR SEQ ID NO: 1498:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAACTTTG GGAAGTCAA ACGGTTGTAA TCGTTGAACA TAAAGTTAAA CACATTCTGG 60  
 ATCATGTCTGA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

(2) INFORMATION FOR SEQ ID NO: 1499:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATTGTATTT GTGACGATTA TCATTCCAGC ATTAGAATAT 60  
 TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120  
 TCAGGTG 127

(2) INFORMATION FOR SEQ ID NO: 1500:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 560 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60  
 CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTCACATAT GCCTCCTCTT 120  
 TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180  
 GTAGTCACAC AAAAaGCAAA CGTTkGTTTCG TAAAAATGTC GAACAAaGAA AnACAAACAT 240



AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360  
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420  
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480  
 TTTATAGATT GAGGCACCAA TTAAAATTAA TGTCAGAATA GTACCGACCC ATTTACTTCT 540  
 10 TGTATTACA CTAAATAATA 560

## (2) INFORMATION FOR SEQ ID NO: 1501:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60  
 AAGAGCCACG TTTTGGTTAC TTCGTGGGCG TGAATTATTA TG 102

## (2) INFORMATION FOR SEQ ID NO: 1502:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60  
 TCGATTGGCT GTTGTTTCTG TTACCCATAG TACTTTTTC A TCTGTACTTA AAGCAATACC 120  
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180  
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240  
 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300  
 45 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CnGGAGATT TAAAATCTCC 360  
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

## (2) INFORMATION FOR SEQ ID NO: 1503:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60  
 TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCnTA 120  
 GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

## (2) INFORMATION FOR SEQ ID NO: 1504:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 237 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60  
 CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120  
 25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180  
 CnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

## (2) INFORMATION FOR SEQ ID NO: 1505:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 209 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

40 CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTAAAT AAAGATAAAA GTGACAGTAG 60  
 CGGGAAAACA GgnCCATAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120  
 AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180  
 45 ACATAATAAA TGTTGTAGAA GATATGGGT 209

## (2) INFORMATION FOR SEQ ID NO: 1506:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 121 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

5 AAAATGTGGC TATTGATTTT GACTTGGAAC TTTTGAACA TTTCTCTCAA GGATTTAAAT 60

GTAGGTAACA GGGCAGGTAC TACGGTACTT nCCTATTTTT TTATGCAAAT TTTAAAAAAC 120

A 121

## (2) INFORMATION FOR SEQ ID NO: 1507:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 144 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

20 AATGACAAGG TCAGCATTAA AACCATTTAA AAATAAACGC GTTATGGTTA CTGGACGTAT 60

ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTTAAGC CGAATGTAAG 120

GATATTATTA AAAGANGTAT TTGT 144

## (2) INFORMATION FOR SEQ ID NO: 1508:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 139 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

35 CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTTCT TCGTTTCTTC AGATAAACTT 60

TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTTAATTT GTGCTTnTTA 120

40 ACAAACTCAA TAGCTTGTC 139

## (2) INFORMATION FOR SEQ ID NO: 1509:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

50 TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

## (2) INFORMATION FOR SEQ ID NO: 1510:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAAGCT 60  
 ATGAATCTTT CAAGATCTTC ATTGAAC 87

## (2) INFORMATION FOR SEQ ID NO: 1511:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC 60  
 CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAAATTCC AATCCTTAAA 120  
 AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTTAATTTT CCCAAGGGAA TTAAAATTT 180  
 TGGGGTTTTT ThAGGnCCCT TTTGGGAAAA ACCCAAC 217

## (2) INFORMATION FOR SEQ ID NO: 1512:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCAnG GACAACGGGC CTCAAAAAGC GGTGCACAAA 60  
 CGTTCCGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A 101

## (2) INFORMATION FOR SEQ ID NO: 1513:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AnATAGCAAC AGATATCATA CACACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAn TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

ACTAGGTCTT GCCACGTTTA TATGCATCT 89

55

## (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60  
 GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

## (2) INFORMATION FOR SEQ ID NO: 1518:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAAATA TATGAGAAGA TAAAATGAAA 60  
 AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120  
 TAACCTAAAA AGAATTGGAG ATTAATAATGA TTATTAACCT TGAAACACAA CAAATACATT 180  
 TTGATTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240  
 ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTAAATAACC 300  
 AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360  
 AAACAAGAAT TGGTCGTTTT TTAAATATTA CTAACGGTA CGAAGAAATC CATTCTACCG 420  
 ATGAGAAGTA TGTnATTGCA ACTATTAA 448

## (2) INFORMATION FOR SEQ ID NO: 1519:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60  
 AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

EP 0 786 519 A2

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240  
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300  
 5 TGAC 304

(2) INFORMATION FOR SEQ ID NO: 1520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTTTT 60  
 20 TTTTTTTTTT TTTCTGTTGG CCTTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120  
 TTCAACTAAG ATAGCTAAAA TTCTAACT TATATGTAAA AATTACACTC CATTTTAGCA 180  
 CAAATGTtAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAATA CACAGCTTTG 240  
 25 GTAGGGnAAT GGTCTGGAA ATAATGTAAT GCCAAGTnTC TGATCATTtA ACATATCACT 300  
 CACCTCCTTC TTCATCTGAT GT 322

(2) INFORMATION FOR SEQ ID NO: 1521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60  
 40 GTGATGTGGT ATTTTGCATC GGTCTGCTT GATTCCAGAC ATGTC 105

(2) INFORMATION FOR SEQ ID NO: 1522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:

GATCGTATTT CCCAGATGTA AATTChGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG

118

(2) INFORMATION FOR SEQ ID NO: 1523:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

ChGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACTT GTAATATTAT TACCCCCCGT 60  
 ATAACCCATG TATATCTATA CTTTACCACA TAAATAATT CCGGGACTAT TTGGCACATG 120  
 TTTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

(2) INFORMATION FOR SEQ ID NO: 1524:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTTGATCCT 60  
 TGAGTAAGAT TAGTCAAGGC CG 82

(2) INFORMATION FOR SEQ ID NO: 1525:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60  
 AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120  
 TACTATTTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180  
 AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAAA AGCAAATATT 240  
 CAAAAACTGA TTTCAGAAAT AGAAGAATAC ATTAAAAATT AAATCAAGGT TAATTGCGTT 300



AAAATTAAC TAAATTTAA ATATTGAAGA GCTTAATTAA

400

## (2) INFORMATION FOR SEQ ID NO: 1526:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

ACTGTCTAAT ATTCAC TCCC TTAAAGTGTT TTTCATATTT TTCTATTAAT GTTCATATTG 60  
 TAGGGTGTG AATGCATCTA AGCATtnCAA GTTATTCTCC AAGTTCATCA ATTTCAAAT 120  
 GGAAC 125

## (2) INFORMATION FOR SEQ ID NO: 1527:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

CATGTTTATT TATGTTTCGG CTTTAAATGTT GAAGAGTTTT ACAAAGTTTA CCGATTGCAT 60  
 TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG nA 112

## (2) INFORMATION FOR SEQ ID NO: 1528:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACAACCAAA AAAGTATGA 60  
 ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAAcn AACAG 115

## (2) INFORMATION FOR SEQ ID NO: 1529:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

5 ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTTCATGT TTTTGTAAT 60  
 AATGATTCGC TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT 120  
 10 TTTTGATATC TACTTTTTTC TCTTCCAAAA TTAGCTCAAT CATATCTTTA ATAATTTCTT 180  
 CTACTTCATC TTTAGGGAAC CAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA 240  
 AATGTTCTAA CATGATACCT ACTTGTGAA GCTCATTTT ATATTGATCA ATGACTAATT 300  
 15 GTTCATCTTT TGAAAAATGA AATGTTAACG GGATTAATAA ATCTTGACT TCATTGGTAA 360  
 CCTCACCTAT TTAATCTCGA AAATATTCAT ATTTATnCT 400

## (2) INFORMATION FOR SEQ ID NO: 1530:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 97 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

25 TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAAA 60  
 30 GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA 97

## (2) INFORMATION FOR SEQ ID NO: 1531:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

40 TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTCC AACTATATAC GATGTATCAA 60  
 45 CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA 120  
 TCTTCACGTA CTTTACGGCG AGATGATGAC 150

## (2) INFORMATION FOR SEQ ID NO: 1532:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACCAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60  
 GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGCCTATCC TGAAGCCAAA 120  
 GGAAATGAGA TCGGAATT 138

## (2) INFORMATION FOR SEQ ID NO: 1533:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

GGGGnCCnGG CAATGGAGGC GTGCTTGAT GGTGCTTGA ATCATCCCTT TGGCCTCGAT 60  
 CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120  
 25 GTAATTnCTT ATACCAACAT TTAAGGCATG TGTAATGCT GGCTACTCCC GCTTCGTTAT 180  
 CAGCTACATG ACAAATACAG ATGCCATCAC CTTGCGTCC ATTTTAATCG TTGATGCTTG 240  
 GAAATGTTTT TTGTAAATAT CAATGTTATC CTTGCTGTA TGTATCGCAT TTATATCTGG 300  
 30 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTCG GCAGCTATTT TGGCAGATGT 360  
 TGCCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420  
 35 ACTTGGTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

## (2) INFORMATION FOR SEQ ID NO: 1534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

TACGCTAATA AATAGTTCAC TTTCCATTT TGTGTAGTCA GTCATTGTA TTCTTCAATT 60  
 TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAG TTGTCCAATA 120  
 50 TACTCTAACT GGTCATGATA AACAn 145

## (2) INFORMATION FOR SEQ ID NO: 1535:

(A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

10 ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATTAA 60  
 CAAATTATTT CAAACTTTAC AATTnAAACT AACAGTTTTC TCAATAAAAT GCAAGCTTTT 120  
 CTCATTTGTT ATTTAGAATG ATTATGATTT A 151

15

(2) INFORMATION FOR SEQ ID NO: 1536:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 86 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

25

ATAATAGAAT CATTACAAAT TATTTTCAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT 60  
 AAAATGCAAG CTTTTCTCAT TGTTAA 86

30

(2) INFORMATION FOR SEQ ID NO: 1537:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

40

ACCAAAGTGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC 60  
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTACTGATTG 120  
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAGCG AACAAGTCGA AAGTTATTTA 180  
 TAGAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG 240  
 AGGGTACTGA TGGTTAAAC AGTTTATGTA ACAGGTTACA AATCATTCGA ATTAAACATT 300  
 50 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAAACAAT TTATAAAACA TAAATTGAA 360  
 CAACTGTnGG ATGAAGGATT AGAATGGGnG TTAATACAAG 400

(2) INFORMATION FOR SEQ ID NO: 1538:

55

(A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

10 ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATn CTGACACCTC 60  
 AATTTCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120  
 CGCAAATCAC TCGTGC 136

15 (2) INFORMATION FOR SEQ ID NO: 1539:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 85 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

25 TAAATATCTC GGCACAATGA TCGGGGATAT TTTTITACAA TAGGCATAAA GGCTGGAAAA 60  
 AACATATCTA GTGCTATGAT ACTTA 85

30 (2) INFORMATION FOR SEQ ID NO: 1540:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

40 ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTGAAATC 60  
 AGCTGAAGAC ACG 73

(2) INFORMATION FOR SEQ ID NO: 1541:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

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TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

(2) INFORMATION FOR SEQ ID NO: 1542:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA 60

TGAGAGGAAT AGGGACAAGA TCATCAC 87

(2) INFORMATION FOR SEQ ID NO: 1543:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTCTG AAAAATATTT AAATTGAAGA AAAGAATATT CTAACACGG AAGTGGTATT 60

AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA 120

ATAACTATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAC TGAAGTAAAA AGCATAAGGA 180

ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT 240

TTAAACAAAA ATAAGTGTTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA 300

AAGTCGTCAA ACGGCACTAA TATTTAnnAA ACAAAATGTTT TAAGTTGTTG GATTTnAAAA 360

TATTGAATTA AAGTGTAAT TTGGACTATT GGAAATTGCG 400

(2) INFORMATION FOR SEQ ID NO: 1544:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAAT 60

## (2) INFORMATION FOR SEQ ID NO: 1545:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAAATTAT AAACATGGTA AGCGTGTTC 60  
 TCGTATTACT TTA CT TAAAC AACCGGTATA ACCATACCTA ACTTAGTA 108

## (2) INFORMATION FOR SEQ ID NO: 1546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAATATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60  
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120  
 CGGTTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180  
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240  
 TAGGTTTAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300  
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTTA GATAATCTTT 360  
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420  
 CACCATTCTA TATTTCTATT TtCACTGTaC CATCATCCCC GCTATTGTGG aAGAAaTTGT 480  
 TTTtCGCGGT ATGATAATAA GGGktATCTT CAGAAAAACAC TTGTTTTTAG GGTTAATTGT 540  
 GTCTAGTTTA GTTT 554

## (2) INFORMATION FOR SEQ ID NO: 1547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TAAAGCAACA CTTTAAATCC CTTTGAAC TTAGTTATCC GCTAAATCAT AAGCTTCTTT 60  
 TTTGCTACTT AAAAAATCA ATCCTTGTA AATTTACCT GAATATCCAT AGTAATCTGT 120  
 5 CTTTGAATA ATATAATTAA CTCTTTCATC AGAAGTTAAA TATCTCAGT TAGTTACATC 180  
 ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240  
 AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTTATA TGCAATATTA TAATCAAACA 300  
 10 GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCAG 360  
 AACTTAGGGT TTGGAGGTAG GTTAAAATAC TCGGTTGGAT 400

(2) INFORMATION FOR SEQ ID NO: 1548:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

CGCTCTAGAA CTAGTGGATC CCCCAGGCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60  
 TAGGACGGAG GGA 73

(2) INFORMATION FOR SEQ ID NO: 1549:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

GTATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60  
 ATGGCACCTC TTG 73

(2) INFORMATION FOR SEQ ID NO: 1550:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:



GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT 120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60  
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAAGATTT TAGAATTTTA GAGGGTCAAG 120  
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180  
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60  
 TAGACAAACT AAATC 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCGTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAATATTG 60  
 TTATATAACT TGTAGTTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120  
 CATCAACATG ATThA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10 TTTGAnATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60  
TAGTTGCCCC ACTAACGGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25 AATAAGAAAC AnGACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA A AAATGTTGGT 60  
GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 86 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40 CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60  
GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55 GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACAATTAGG 60

## (2) INFORMATION FOR SEQ ID NO: 1558:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCTTGTT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60  
TTTACCAGTC TTCTTCCCTT TA 82

## (2) INFORMATION FOR SEQ ID NO: 1559:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60  
CATAAGTATA TGCAGTGA 78

## (2) INFORMATION FOR SEQ ID NO: 1560:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60  
AATAAACGTT CAACAA 76

## (2) INFORMATION FOR SEQ ID NO: 1561:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 200 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCCA ATTCCCTTAA 60  
 GGGTTTTCTT TGGGGGCCGG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120  
 ATTTTnGAAA AGTTTTAATT TAAGGAAACC CATTnGTCCG GAATTTTAC CCCATCCTTA 180  
 TGGGGGGTCC CAAAGATTCC 200

(2) INFORMATION FOR SEQ ID NO: 1562:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60  
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTTCGTA 120  
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180  
 GAAAAAGATG AAGACTACTT CAAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240  
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300  
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360  
 ATGGAATTGT TGGnCACTCA TGGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

TCTTCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60  
 CGATACTGTT TCACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120  
 CCATTATGAT AAATAATTC TCTTGTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180  
 ATTTCTACAT CTACAATTTT GCCATTATAA ATAAGTGTTC GATCAATTGT TTTTTCATT 240  
 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300  
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAA TATATTAAAA AGTGGTATTT 360

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

(2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCACGAC TTGCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC 60  
 AACATCTGC 69

(2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAAGTAA TATATCCAAG 60  
 CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG 117

(2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT 60  
 ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT 103

(2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 81 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

5 AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCAATTTGT CGGCAACTGG 60  
TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 80 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTC 60  
20 ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

TTTTTAAATA CGATTTTAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60  
35 TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60  
50 TGTAATATAA ATATTTTCATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTACTAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

55 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10

GTCATTTIATT TGTACTAATT CAAAAACAT TGTGTGTTTC CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAACCTGTA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25

TTGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

40

TCCAGTTGCT TATT 74

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTAAACAAAC TTTTATTAAT 60

55

GTTTTTGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

GTAATTAATG TAATAATAGA AAAGTGTATA TATCTCATAT CGCCACCTGC TATACAACCTT 240

ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300

5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

(2) INFORMATION FOR SEQ ID NO: 1575:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATAnGTGTCA TAGGGTGACT CAGCATAACG 60

20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

(2) INFORMATION FOR SEQ ID NO: 1576:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 79 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

GCTAGATTGC GGGAAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60

35 TAATAAAAAA TTGATGAGA 79

(2) INFORMATION FOR SEQ ID NO: 1577:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 69 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTTGAAA TGATCGTGTA 60

50 ACTTTTCAT 69

(2) INFORMATION FOR SEQ ID NO: 1578:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1578:

AAATTGTCAC TnCAGGTCAT AACCAACCAG GTGGGACTGC ACGAGCGTTA CTAATGATCC 60

10 AACGGTCTTG CTTTGTGATG AGGCAACAAG TGCACTTGAT CCGC 104

(2) INFORMATION FOR SEQ ID NO: 1579:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1579:

GCTCAATAGA TACAACTATT AGGACAACGG ACTATCGTTT ACAATTTATT CCAGATAAGG 60

25 ATCGCGCAGG TCGTATGCGT AACTATGCA 89

(2) INFORMATION FOR SEQ ID NO: 1580:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1580:

TTGTCTCTAA TAATGGnTTT GGCTTTTCT AAAATTTTCAG ATGTGGGTGC TGGTGAAGCA 60

40 CCGACTGGTT AATTTTCTTG TCGTCACGGC CACTTTTTGT TT 102

(2) INFORMATION FOR SEQ ID NO: 1581:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1581:

AAGGTGCTGT TATTAGGATA ATGnATTAA ACCCCATGGT ATGAAGGATA TCTGGAAGTT 60

AGATTGGATA TCCCTTAACC ATGGGGGGTT TTATTTTGG GG 102

55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1582:

TTCAGGGGAG CTGAACATAT TGACGACTTT TGGGTCAATT CATTTTGCAT TTTACTTTTA 60  
 AATGCGTTGT TGCATGTAAT TGTATTAACG ACATACATGG TGGGGCTCTA AATnAATGCT 120  
 TGACTAATTT CTTGGATGGA GACCACGATT TACCAACTCA 160

## (2) INFORMATION FOR SEQ ID NO: 1583:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1583:

TAAAAGCAAG TACATTAGAG GTTAGATCAC AAGCTACTCA AGACTTGAGT GAATATTATA 60  
 ATAGACCGTT CTTTGAGTAT ACAAATCAGT CAGGATATAA AGAGGAAGGA AAAGTGACGT 120  
 TTA CTCTAA TTATCAACTT ATAGATGTAA CTTTAACTGG GAATGAAAAG CAAAATTTTG 180  
 GTGAAGATAT TTCTAATGTA GATATATTTG TTGTAAGAGA AAATTCTGAT AGATCTGGTA 240  
 ATACAGCTTC AATTGGTGGT ATTACTAAAA CAAAcGGTTC AAATTATATT GATAAAGTAA 300  
 AAGATGTAAA TTTAATAATT ACTAAAAACA TCGATAGTGT TACATCAA 348

## (2) INFORMATION FOR SEQ ID NO: 1584:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1584:

AGCCAGCAGT AGATAGATAT ATTAATGAAT TCTTGAGAGAA AGGTAGCTCA AATTGTCCAA 60  
 TTGAGATATT GAA 73

## (2) INFORMATION FOR SEQ ID NO: 1585:

(A) LENGTH: 255 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1585:

10 GTAAGGAATG GTCACGTATT CCACACTTCT ATATGAATTA TTATGTATAT CAATACGCAA 60  
 mTGGTTACAG TGCAGCTCAA AGCTTAAGTC ATCAAATTTT AnCAGAAGGT AAGCCAGCAG 120  
 TAGATnGATA TATTAATGAA TTCTTGAAAA AAGGTAGCTC AAATTATCCA ATTGAGATAT 180  
 15 TAAAAAATGC TGGTGTAGAT ATGACAACAC CTGAACCAAT TGAACAAGCT TGTGAAGTTT 240  
 TTGAACAAAA ATTGA 255

## (2) INFORMATION FOR SEQ ID NO: 1586:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1586:

30 TTATTAGGTG AntCCATTGG CAACATTGAT TGGTTTGTC TTAGGACAAA TTTTATTATA 60  
 CATTGGCGTT ATTTTACTA TCTTATCTGG TATTGAATAC TTTTATAAAG GTAGAGATGT 120  
 TTTTAAACAA AAATAAATAT TTGTTTATAC TAGATTTCAT TTTCATATGG AATCTAGTTT 180  
 35 TTTTAATCCC AATTTTAGAA ATTAGCCACG CAATTGTTTA TAATGATATA TTGTAAACAA 240  
 ATATTGTTC ATTTTTTTAG GGAAAATCTG TAGTAGCATC TGATACATTG AATCTAAAT 300  
 40 TGATGTGAAT TTTTAAATGA AATACATGAA AAAATGAATT AAACGATACA AGGGGGATAT 360  
 AAATGTCAAT TGCCATTATT GCTGTAGGCT CAGAACTATT 400

## (2) INFORMATION FOR SEQ ID NO: 1587:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 561 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1587:

55

CAAAGCGTCT ATTATTGTTT GATTTTGATG AACATATTT TAAACATAAT ACAAATGAAG 60

AAGTGATCAC TGCTGTATTG ACAGGAAGTA CATTTCAAAG TGTCATGGAT AAaATGGATC 180  
 AAGTTAATAT GACGTTTAAA CCATTACATA TCTTTTCTGA TTTGAGTTCT AAAATGTTCA 240  
 5 CTTGGAATAA TGGCGAATAT GTTGAATCAG AAACATATAA AAAGAAAGTC TTGAGCGAAC 300  
 CATTTTTATT TGAAGATATT GAAGATATAT TACGTCATAT TTCTGCGCAA TATAATGTCTG 360  
 AATTTATTCC ACAAAGAGCA TTTGAAGGTA ATGAAACACA TTATAATTTT TATTTTCATT 420  
 10 CAACAGGTAA TCACAACAAT GATAGTCGTA TCCTAGAAGC ACTnnTCAGA TACGCAAATG 480  
 ACCAAAATA TACAGCGAGA TTTAGTCGAA GCAATCCATT AGCTGGTGAT CCTGAAAATG 540  
 15 CGTATGATAT TGACTTCACA C 561

## (2) INFORMATION FOR SEQ ID NO: 1588:

(i) SEQUENCE CHARACTERISTICS:  
 20 (A) LENGTH: 79 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1588:

CCAACAGTTT TATCATTATG GCAAGTCTG TTAAACCTGC TGAGAGTTAT TTTGCACTGA 60  
 30 TTGCAAAACC AGAAATTGG 79

## (2) INFORMATION FOR SEQ ID NO: 1589:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1589:

GCAGATATGC AGCAATTTAT AGAGGACTAG TAAACGCATA TATGACTTAC AGCTTTCAGA 60  
 45 CAAATAGCTT TGC 73

## (2) INFORMATION FOR SEQ ID NO: 1590:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

TCATTTTATG GTTGATCATA GGCCTCGTCT TTTTCCTTGG GGATTTTATC TTAAATACA 60  
CAGATTGGCG C 71

(2) INFORMATION FOR SEQ ID NO: 1591:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1591:

ATACAATACA ATTACACCA TATATGGATA AAATGCAAGA TGCAATTACT GCAGTTGCAC 60  
AGTGCAAGTA GCAATACC 78

(2) INFORMATION FOR SEQ ID NO: 1592:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 168 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1592:

CCAATTAATT AAAAACCGGA AAACCAATTT TTAAACCAA TTAAGTTAAA AATTTTTTAA 60  
AATTGGGCCC CAAACCTTGG AAAAAGGTTT AATTTTCCTT TCCCAATTTT CCCAAAATTT 120  
TTAAACCCAA AAATTCCCGG TTTTGGGTTA AATTTCCCTn GGTTAAAT 168

(2) INFORMATION FOR SEQ ID NO: 1593:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1593:

TGCTAGAAAG TATAGAACCT GGTTCAAACG CATGGTTTTA TGTCCTTTT TAAACnGATG 60  
TTTATTAAAA AAATATGGAA ATTGGCCACG TCCGCCAATT TCCTTAGAAA AGAACGT 117

(2) INFORMATION FOR SEQ ID NO: 1594:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 66 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1594:

AGACGAAGCC AAAAAGTTAT TCGCCAAATC TGAAATATTT TCAAAGACCT TAAAGGCGTA 60

10

AAATAC 66

(2) INFORMATION FOR SEQ ID NO: 1595:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 100 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1595:

ATTTTATTTA GGCCAATAAC TGnCTACTTC TGAAATAAGT TGCTTTGCAT AGTCTGACGC 60

25

GGGATGTTTG GATAATATCT TCTGTGTTAT TGCAATGCAA 100

(2) INFORMATION FOR SEQ ID NO: 1596:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1596:

GACCAGACGG CCGTAAACCT GGATGAAACC GTCCATTAGA TTCTGAAGTT GGTATTTTAC 60

40

CTAGAACGCA TGG 73

(2) INFORMATION FOR SEQ ID NO: 1597:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1597:

CTTTATAAAA TTGTCTTTGA CTAACAGGAT TTTCAACGCT ATTACAAAC CATGGTTTAA 60

55

CATATT 66

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1598:

TATGGCACCC TCTTTGATnT TGTGACCGTT TTTGGTAATT CACCATTATT GTACGAACCA 60  
 TGGAATTGCG TGCCTTCCTT TAGGCAATAA CATAATTATA TTTATCCCCT TCTTGTCACT 120  
 AGAGGTGCTG ACAACACCA 139

## (2) INFORMATION FOR SEQ ID NO: 1599:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1599:

CTCCTCTGCA TGCACATCTT GTTGTAGCAA GGTTACATG TAATTTATTA AATCGAAACT 60  
 CTATCCAAC TATGTTATAAA GTTCATTCTA AACAAATnAG T 101

## (2) INFORMATION FOR SEQ ID NO: 1600:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1600:

TTGTACCAAG GTTCACATGT AATTTATTAA AGCGAAACGC GTATCCAAC TATGTTATAAA 60  
 GTTCATTGCT AAACAAATAA GTATAAAAAT TCAATATTTT TATTACTAGA ATATGGTTAA 120  
 ATACATTTAT TTCTTATAAn AATTTGATGT TTAAGATATT TTGCCAAATT GA 172

## (2) INFORMATION FOR SEQ ID NO: 1601:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1601:

5 TTGGCACTGG CCGTCGTTTT ACAACGTCGT GCACTGGGAA AACCAAACA CGACGTTGTA 60  
 AAACGACGGC CAGTGCCAAG CTTGCATGCC TGCAGGTCGA CTCTAAGAAG GA 112

## (2) INFORMATION FOR SEQ ID NO: 1602:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 679 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1602:

20 TGCAATGGTT AATCATCTCA TATAACAACA CATAATTTGT ATCCTTAGGA GGAAAACAAC 60  
 ATGACAAAAC ATTATTTAAA CAGTAAGTAT CAATCAGAAC AACGTTTCATC AGCTATGAAA 120  
 AAGATTACAA TGGGTACAGC ATCTATCATT TTAGGTTCCC TTGnATACAT AGGCGCAGAC 180  
 25 AGCCAACAAG TCAATGCGGC AACAGAAGCT ACGAACGCAA CTAATAATCA AAGCACACAA 240  
 GTTTCTCAAG CAACATCACA ACCAATTAAT TTCCAAGTGC AAAAAGATGG gCTCTTCAGA 300  
 GAAGTCACAC ATGGATGACT ATATGCAACA CCCTGGTAAA GTaATTAAAC mAAATAATAA 360  
 30 ATATTATTTT CAAACCGTGT TAAACAATGC ATCATTCTGG AAAGAATACA AATTTTACAA 420  
 TGCAAACAAT CAAGAATTAG CAACAACGTG TGTTAACGAT AATAAAAAAG CGGATACTAG 480  
 AACAAATCAAT GTTGCAATTG AACCTGGATA TAAGAGCTTA ACTACTAAAG TACATATTGT 540  
 35 CGTGCCACAA ATTAATTACA ATCATAGATA TACTACGCAT TTGGAATTTG AAAAAGCAAT 600  
 TCCTACATTA GCTGACGCAG CAAAACCAAA CAATGTTAAA CCGGTTCAAC CAAAACCAGC 660  
 40 TCAACCTAAA ACACCTACT 679

## (2) INFORMATION FOR SEQ ID NO: 1603:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 85 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1603:

50 CATTTTAATT GATATAATTT AGACTTTAAC ATTTTCATGCT GTTCACGGTT TTAATTTGAG 60  
 55 ACGTCATTTG GTATAACAAC TATAC 85



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 68 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1604:

ACTGGTGTGA ATAGCTCCAG CAATTTCTTT AACCGCGATC ATAATCAACG TCACCTTTTA 60  
 ATTTGCCA 68

(2) INFORMATION FOR SEQ ID NO: 1605:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1605:

TGGGGGGTtT TTTTGGGTTG GGTAAAAAA AGGGAATTGG CCCAAGGGGG GAATTCCTT 60  
 AAAAAAACCC CCAACCCCT TGGGAAATTA AAAATTGGGT TAACCGGGA 109

(2) INFORMATION FOR SEQ ID NO: 1606:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1606:

GCTTATATAC ATGTTCCATT ATAAAAGGAG TACGAACGAA AGTAACGCAT GACGTTAATT 60  
 TAAAAATATT GTAATAATTA TGGATTAAAT TTA AACCA GGGGTATTCC AT 112

(2) INFORMATION FOR SEQ ID NO: 1607:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1607:

GTTCAAGTTG GTAACCTAAC AACACGnAAT TAGTTTAAAC GTTTGG

106

(2) INFORMATION FOR SEQ ID NO: 1608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1608:

CACACTGATA CCATAGGATT TATGATAGAT CAACAGCATG ACCAAATGTA TGACCTAAAT  
TTAAAAATTT ACGTACACCT TGT

60

83

(2) INFORMATION FOR SEQ ID NO: 1609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1609:

AAAAGAATAA AGTCACTGAA CAATGGTCTT TCACAAATGAT GTTGCCTCAA TGCACAAGCG  
CATTATGThT GTGACTTGGG CATTTTGGCT TATCAGCTGA ATATTATACG CATTTACATC  
CCAATTAACG TA

60

120

132

(2) INFORMATION FOR SEQ ID NO: 1610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1610:

TTTAATGCAT ACGCTTCTCG CTTAGCAATT TCTTGCACG TCTAACAAGC ATTAACGCTC  
TTAnTACTAT AATCACAACA AAACCAGCGA AATATAACAT GCGTATA

60

107

(2) INFORMATION FOR SEQ ID NO: 1611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 84 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1611:

5 TTCGCACCTG GTATCGTTCA AACCACCAAT GATGGCCCGT CTCGCCGTGG CAACAGCCGA 60  
 AGACCGCAGG TAAACCCTGA ACGC 84

## (2) INFORMATION FOR SEQ ID NO: 1612:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1612:

20 ACTCACATGT ACGATAACAC CCTTCGTAAA TCCATCTTTG GTTTGCCAAG TTCGTCGTTG 60  
 TAAACTGTCT ATACTCGTTA AACCGCTACA TGTTTTCTTA AAnCCTGTGC CTAAATGCTT 120  
 TACTGAA 127

## (2) INFORMATION FOR SEQ ID NO: 1613:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1613:

35 CGTTCAACTT TTTCAATTTT TAACGGCGTT TTAATATCTT TATCTGTAAC TAATTCAACT 60  
 CCAAACATTA AGCCTCGTCC TCTTACATCA CCAACATTTT GATGACGCTT CAGCGCATGT 120  
 40 AACTGTTTC 129

## (2) INFORMATION FOR SEQ ID NO: 1614:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1614:

50 nCAACTAGTG GATTTAAnAT AnACATAATT ATAAATGCAA ATGCTAATAG CTGAATACCC 60

55

GCACTAGGTG CATAATTTGT GTATTGAGCA AATAAGCTA ATACAATGAT TGTAATTCCT 180  
 TTAATGACAA ATAAAGGTAA ATTTAATCGT TTAAAGGTT GGTAAATTAA AAATACAATT 240  
 GCAGCTATAT GCGAGCCACT AACTGCCAGC AAATGATATA TACCTATCTC TTAAACACGT 300  
 TCCTTAAATT GCTCATTAAC TTCTTTTACG TCACCAGTAA TCAATGCC 348

(2) INFORMATION FOR SEQ ID NO: 1615:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 72 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1615:

GAGCTCCACC GCGGTGTGCG CCGCTCTAGA ACTACTGGAT CCCCCGGGCT GCAGGAATTC 60  
 GGCACAGCAT AT 72

(2) INFORMATION FOR SEQ ID NO: 1616:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 63 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1616:

CATCACGTTA AATCATAACG CGTGACGTGC TTTTGCTATT TGTCTCTCGG TATCTCTATA 60  
 TCT 63

(2) INFORMATION FOR SEQ ID NO: 1617:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 113 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1617:

ATTGAATTCA AGGGTGAAC TCATGAATTG GCTGGAAAAA GGTAGATTTA ACTGGATGGT 60  
 TGnAGCCATA TATCGGTGCG TTTATTTTATT TGGTATTTTA AAAATCAACC TCG 113

(2) INFORMATION FOR SEQ ID NO: 1618:

(A) LENGTH: 80 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1618:

10 GTACAATAAA GTGGTAAACA ACATGCCAAT GGAAAAAGGG ATTAAAGGTG TTTATGTCAT 60  
 TCTTAAAGAT AGTAACGGTA 80

(2) INFORMATION FOR SEQ ID NO: 1619:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1619:

25 ATCTTATGTT TTTTTCCTAA AACTTCTGCT ACTTCATTTA TTTGATGTAT GGTAGATAAT 60  
 TCTGTTTGGA TACTCATATC AACTTTTTTCT ATCATATCTG AAATCTCTTT TnTGGCA 117

(2) INFORMATION FOR SEQ ID NO: 1620:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1620:

40 CGATAAACCC TCGTAATCA ATCTTTGGTT TGCCAAGTTC GTCGTTGTAA CAGTCTATAT 60  
 CGTTAAAAGC TACATGnTTT CCTAAGCCTG TGCCTAATGC TTTACTG 107

(2) INFORMATION FOR SEQ ID NO: 1621:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1621:

55 AATATCGTGT CTCTGTCCAG TGCTGTCCAA TCAATTTTGA TCCACCGATT GTCATACGTA 60

## (2) INFORMATION FOR SEQ ID NO: 1622:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 75 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1622:

ACCATCTGAC ATCATCAATT ATGAATTAAT GATGATATTA AAAATAAATT TGAAACATTG 60  
CCAATTGATA GTGCC 75

## (2) INFORMATION FOR SEQ ID NO: 1623:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1623:

TACCTGTGTA TCAGCTCTAT TAACAACCTA ACATATGTGA ATAATTTGCG ATCCTTGTTG 60  
ATAATGCTGT AATTGAC 78

## (2) INFORMATION FOR SEQ ID NO: 1624:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1624:

GCAAGCTTTT GCGGCTTCTG ATGCACCATT AACTTCTGTA ATTAAACACA CAAAGTGAAA 60  
CAGGTAGGTA ATGCAAACT GCAACGGACA ATCGA 95

## (2) INFORMATION FOR SEQ ID NO: 1625:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

ATTGCGATTA CACAGTAGTG AATGAGATAT TTGACATGAA AGCTCCTGCA GCTTCTAAAG 60  
AAGAGTTAGC AGGTTT 76

(2) INFORMATION FOR SEQ ID NO: 1626:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 126 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1626:

AAAAGCTAAA AAAGATTATC AGGTGTATCA CAAACTCAA TTCTCATTAC CATTATCTC 60  
AGTGTGAACG TCTTAATTGA GAACTAATCT NAATTGAGAT ATTAGTCATA TAAGGATGGA 120  
CAAGCA 126

(2) INFORMATION FOR SEQ ID NO: 1627:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1627:

TGATACGATA GAACATAGTT CAGCACATTG TTTGTTGAAA TTGGATATTA CCGCCATTTT 60  
TTCACAATAT CAATAATACC TGAACGTGTT GGTtntTCCA CATTATGATT GTACAT 116

(2) INFORMATION FOR SEQ ID NO: 1628:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 91 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1628:

ATTTTGCCT ATCTTGAACA AATCCGATTT TTCTCAGACA CTGAATCCAA AGTATTCATG 60  
TACCATAAAC CATCTGCATG TTGATTTATG C 91

(2) INFORMATION FOR SEQ ID NO: 1629:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1629:

	ACAGAAAGTC AAACAGTAAA AGCGGCAGAA TCAACTCAAG GTCAACACAA TTATAAATCG	60
10	TTAAAATACT ACTATAGCAA GCCAAGTATA GAGTTAAAAA ATCTTGATGG TTTGTATAGA	120
	CAGAAAGTGA CAGATAAAGG AGTATATGTT TGAAGGATC GAAAAGATTA TTTTGTGGC	180
	TTGCTTGGTA AAGATATTGA AAAATACCCT CAAGGTGAGC ATGATAAGCA AGATGCATTT	240
15	TTAGTCATCG AGGAGGAAAC TGTTAATGGA AGACAATATT CAATTGGTGG TTTAAGTAAG	300
	ACAAATAGTA AAGAATTTAG TAAAGAAGTC GATGTTAAAG TAACAAGAAA AATTGATGAA	360
20	TCATCGGAAA AGTCTAAAGA TAGTAAATTT AAAATTACTA	400

(2) INFORMATION FOR SEQ ID NO: 1630:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 400 base pairs
25	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1630:

	GCTTTCCTTT TCGAAATCTA TAAATCTAAT CCATTGAAGT AACTAATTA TGATAATTAT	60
	TAATTCCTATA ATTGTnGTTA TCTTTAAATA ATTTGGAAAC CTTTCATAAT CTAAACCAAA	120
35	AAAGAAAGTT AGACATGAAA AAAGTATCAT AAATAATGAT GCTAAACTTA AGGCTTGTGC	180
	ACCTGGCTTT CGAAGAATGT CTATATTTTC CTTAGTAGTC ATATTTACCT ATCTCCTATA	240
	CATTGATTTT GTAATAGCAT ATTAAGTATT TAAAGTTATA AGTACTTAGA TTCTTTTCGA	300
40	TTAAAAGTAT AAAAGCCTAA AATTATCTTT ATATTATTAT TTGATGACAA CTTTATGGTC	360
	TCTATTGTTT TTTACTTAAA CGCTAAAAAG CTAnACAAAG	400

(2) INFORMATION FOR SEQ ID NO: 1631:

45

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 70 base pairs
	(B) TYPE: nucleic acid
50	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1631:

55



TCTAGAGCGA

70

## (2) INFORMATION FOR SEQ ID NO: 1632:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1632:

CAACGAAGAT ATTCAAGTGT TCAGTCATTA TTTTGACTG CTAATGAAAC TGATTCTTGT  
 GG

60

62

## (2) INFORMATION FOR SEQ ID NO: 1633:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 81 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1633:

CTAATGATTA GATTCAAAC AATAAAGACT ACAAAAACAA GTTGATAATG GTAAAGATAT  
 TATCCAACCTT GACATCTAAA G

60

81

## (2) INFORMATION FOR SEQ ID NO: 1634:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1634:

AATTTACCTT TTGTCTAGTA ATTTATTTGT GTAGTGTAAT CATTAAATTGT TTTAATATCT  
 AGT

60

63

## (2) INFORMATION FOR SEQ ID NO: 1635:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 579 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1635:

ACCAACTAGC TAAATGCCAG CGCGGnATCC ATCTCAnAAG TGCACAGCAA GACCGTCTTT 60  
 5 CCAACTTTTG AACCATGCGG TTCAAAATAT TATCCGGTAT TnAGCTACGG TTTCCCGAAG 120  
 TTATCCCACT CTTATAGGTA GGTATCCCC AGTGTTACTC ACCCGTCCGC CGCTAACATC 180  
 CAGAGAAGCA AGCTTCTCGT CCGTTCGCTC GACTTGCATG TATTaGGCac GCCGCCAGCG 240  
 10 TTCATCCTGA GCCAGGATCA AACTCTCCAT AAAAATTATG ATGTTTGATT AGCTCATAAA 300  
 TACTAAATAA TGTITGTAAC TAATAGTTAC GTTTTTGGAA TTAACGTTGA CATATTGTCA 360  
 15 TTCAGTTTTTC AATGTTCAAT AATGTTCAAT CTCTTTTATT CTACTTCATT TATTTCTTGA 420  
 AGTCAATAAC TTTTGAACG ATTACTTTAT TTATTCTATA TTGTTTTTAT AGTTATTTCA 480  
 ATGGtAAGTn TTACACTTTT GaaATTCTTC TTTAAAAACA ACTGCGTCGt TTTTGaCGcT 540  
 20 TTATCaTATT ATCmACTTTG GGaATTTAAA GTCAATAAC 579

## (2) INFORMATION FOR SEQ ID NO: 1636:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1636:

TCGACATTAA GCAACGTTCT TCGCAAAGG TAGCGAGCGA CACGAGTTAA CTTTGCACGT 60  
 35 TTCATTATT 69

## (2) INFORMATION FOR SEQ ID NO: 1637:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1637:

CTGTGACTTC GTCGCGATGA CCTTCGCCGT TGTTCTCATG GTAAGCTTTA AGTATCGTCG 60  
 50 ATGCAGTCnG TTCGCCATGT GCGCCAGCAG ACTGGTTGTA ATGTCGCCTC GTCCGT 116

## (2) INFORMATION FOR SEQ ID NO: 1638:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 71 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1638:

ACAACATTTA GGTACTTTCA CGCATATCAC TACAGCTCAA CGTGATGATT TACCAAATCA 60

10

AATTTACAA G 71

(2) INFORMATION FOR SEQ ID NO: 1639:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1639:

CGGTGGCTTT GTGATTAACA TTGACAAGCA CGTGCAACAA CATATTGAC GCGATAAAGC 60

25

GACATCTAAT ATT 73

(2) INFORMATION FOR SEQ ID NO: 1640:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1640:

CGCGATCATT TTCATTTCTA ATTAATCTTC CAAGTCCTTG TCTAAAACGT GTAACGTCAT 60

40

CAGGTAATAC ATATTCCTTG AAAGTTGAAG TGAATTCAGA ATCCATAAGC CAATATTTTG 120

CATTATGCTT GTTCATAAAC GGTAACTTCG CTATCATCAC ACATTTAATA CCATTTGCTT 180

GAAAATCAAA ACCTTCAAAA AATGTTGACG TACCAAGCAG TATGGCCTTA TCAAAATTAT 240

45

TAAACTGTTG TACTATTTTA TAATTTTGGT TCTGCTGTTG TGTTAATACA ACATAATCTT 300

CAAATTCTGG CAATTCATTT AAGCATATCT TGTACCATAT GCATCATTTT ATAACGTA 360

AATAAGACTA AACATTTTGA TGACGTTATA GTCGTATATn 400

50

(2) INFORMATION FOR SEQ ID NO: 1641:

(i) SEQUENCE CHARACTERISTICS:

55

(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1641:

ATTGTTGTAC CATGTATACT AACAATTGTA ATGTCTCATT TCAGTAAACA AAAAGCGAAA 60  
 5 GACATT 66

## (2) INFORMATION FOR SEQ ID NO: 1642:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1642:

ATTTCGTCGG GAATAAATTT TGCCATTACA TAGAAATATC TAATAGATAA CGAAAAAGTA 60  
 20 TCGTATGTAT TTTTAATATA GTGTAAATA TTATATGTAA AATAAAATGT AGGTTTTTAG 120  
 TTAGAGGCAT TATAAGANAA TTTTGAGTAT AGGTTAGCTT TTAATTATGA ATCTTATTGA 180  
 25 AATTTGATTA ATAAAAATAT GATAGGGGAT TAAAATGAAA CTATTTTATA TCGTATTTCT 240  
 TATTATTATA TGGCTGAATA TATTTTTTAGG AAATGAAATC ATCCATACAC TGA CTGTTTTT 300  
 AATAACAACA TTGTATATTG TTAATTCACG AnAGGGGATT AAAAATGACA GAGTTGAATA 360  
 30 ATATTATAAA CGCGCnTGCA ATCnTTGTTT GAGTCCGGAA 400

## (2) INFORMATION FOR SEQ ID NO: 1643:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1643:

AACTAGAGGA GGACATCCTA ATGGAAGCAA AACCCGTGTC TAGAACAATA AGAATCGCAC 60  
 45 CTCGTA 66

## (2) INFORMATION FOR SEQ ID NO: 1644:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1644:

TATCAATTTTC ATATGCGATT TGGCCTTGCA ATAATTAGGT CTCACCTTGC CATATCTTTA 60  
 5 CCTAAGCAAT ACTTG 75

## (2) INFORMATION FOR SEQ ID NO: 1645:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1645:

CATTCTCCTG CATCATAAAA ATCAACAATT GTATCATCAA AGTGTATCAA AATATTTTAA 60  
 20 TATCCCAATT 70

## (2) INFORMATION FOR SEQ ID NO: 1646:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1646:

AGTGACACTT TCGTTCCACC ACATCGTAAA GAAGTACTTC AAGCACGTGA AGATGACATC 60  
 35 AAAGAAAAAG TTG 73

## (2) INFORMATION FOR SEQ ID NO: 1647:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1647:

CTGTGATTGG TGTGTGATT GTCTTGCTTC CTGTTGTCC TTCTTGTTTC GCTCGCTCTT 60  
 50 CGCCGGGTTG T 71

## (2) INFORMATION FOR SEQ ID NO: 1648:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1648:

AACTATAGAA AAATTCGGAA TTATACCAGA AATGGAATAT GAAATGGAAG AGGTAAACA 60  
AAACGAGCAA TATATTAGAG AGCAAGAAGA AGCTGGAACA ATAGAGGCGA TAACA 115

10

(2) INFORMATION FOR SEQ ID NO: 1649:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1649:

TGTTGTCATG ATCTGAAAAG TCAAAGTCAA TAGAACATTG GCTTTGGCTT TTTATTTGG 59

25

(2) INFORMATION FOR SEQ ID NO: 1650:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 125 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1650:

ACCGATAATA GTACACGGCA TAATGAAACA ACTTGGCATG CACCCTTTTT ACGTTCCTTT 60  
ATCTCTGCAT GATTGTCATG TTCATCATGG TTTGGCTTGC ATTAATAGAG AGGGTTGACG 120  
CAGAA 125

40

(2) INFORMATION FOR SEQ ID NO: 1651:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 71 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1651:

TGATTAACGC GAATGCCACT TTTACTACCA ATGTTCCCAA AGCTGCTTCT GACAAACGCC 60  
ATTGTACTCT G 71

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1652:

TCACTACATG CACCATAAAT ACAGTATGAA CGTATTGAAA TGGGCATTAC ATGATACAGA 60

(2) INFORMATION FOR SEQ ID NO: 1653:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1653:

TTAATTGAAA CAATTGACAA ATGCAATTG ACGCCAAACT TTGAACTTTG AATGGATTAT 60

CACATTATGA TTGTTTCATCC ATGGnCAATT AGCATGGACG TATTACATTC TGGATTATCA 120

AGC 123

(2) INFORMATION FOR SEQ ID NO: 1654:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1654:

CTATGACGTC GCATGCACGC GTAACCTGGG CCCCTCGAGG GATCCTCTAG AGCGGCCGCC 60

CTTTTTTTTT TTTTTT 76

(2) INFORMATION FOR SEQ ID NO: 1655:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1655:

TTTTAAATTT TCGTGAAATC GGAAATGTAC GATTAGTTAT TAAGCGTTAG AATGTGTGAT 120  
ATGTGAACCT GGTATTGACG GCGCT 145

(2) INFORMATION FOR SEQ ID NO: 1656:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1656:

TTTAGAATTC CAATACGCTA TTGCCAGCGA TTTAGCCACT TGTGGGTAAT GATATTGAAG 60  
GTGTTAGTCA AGT 73

(2) INFORMATION FOR SEQ ID NO: 1657:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 93 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1657:

CTTCTGAAAA GTAGTAATGT AACCTATTGG ATGCGAATGA ATCCCCAAAT TTAGTGGACG 60  
TATGTGGCTT CATCTTCAGA ACCTGTATCT GGT 93

(2) INFORMATION FOR SEQ ID NO: 1658:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1658:

AAGTTAACAT GCAAGTTGAC GATGTAATGA CTCAAAAAGA GTGGAAACAA AAACACGA 58

(2) INFORMATION FOR SEQ ID NO: 1659:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1659:

TTAATCCAC AAACAAATGT ATGAAATTGA GTCAGTGATA TTAAATATGG GCTTGAAAGT 60  
 5 GTCTA 65

(2) INFORMATION FOR SEQ ID NO: 1660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1660:

TGCATTTTGT TAAGAACGCA AAGCATTGTA AATTAGTTTT TATAAATTAG GATATTATCA 60  
 20 TGTGTATTGA AAACAATGAA GTGTGCTATG A 91

(2) INFORMATION FOR SEQ ID NO: 1661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1661:

ACATATCTGT CCACACAACA AGGACCATTT GTCTGAAGGG ACAGTGAGTG GGGAAATATGT 60

(2) INFORMATION FOR SEQ ID NO: 1662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1662:

TGGGGTTTTA ACCAGGGGAC CTAAAACCAG CCCCCATTTT CCAAGTTTGG ACCCCAAATT 60  
 CCCnAAATTT AAAAAAATT TGTTTGGGGT CTAAGTTGGG CCGGTGCCTT CCTGCCTAAA 120  
 TTTAGCCCAT GTCTAACATA GTACTTTGGG AACGTAAAAG TTTAATTTA 169

(2) INFORMATION FOR SEQ ID NO: 1663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1663:

	TGGCACAATT GCACCAATTA AATGAATAAC TTTATCATTT TTATATACAG GTACAACAAT	60
10	CGCTTCTTTT ACGAACTCAG ACTGGCGTAA TTGTGTTTCA ATTTCTTCTA ATTCCATTCT	120
	GTAGCCATTC AATTTGATTT GGAAATCAAT ACGACCTTGA ATGAACCATT GACCATTTTC	180
	AAACTTCGCT TTATCACCAG TGTGATATGT ACGAATACCG TCATCGAAAT TAAATACTTC	240
15	AGCTGTTTTT TGGTCATTTT TTAAGTATCC TAAACTTACA CTTTGACCTT CGATAACAAG	300
	TTACACCTTCA TCTGTAGTAG ATAATCTTGC GCCTGGTCTT TCAACGCCAA CAGGTAATGT	360
	CGGATATTGA TCTAAGATTT CTTGTGTAAT TTGAATACTT GTAAGTCTA CCGTAGCTTC	420
20	AGTTGGACCA TATGTGTTGT AAATCGTCGC ACTTGGGAAA CGGTTTACTA ACGCTTTTGC	480
	TGCTCTGTGA GGTAGAATTT CACCACAGAA GAAGAATTCG TTAAGACTAC CATATTGTTC	540
25	TTCAATTAAGC GTTGGTAATA ATAAACACAT TTCCATAAAT GATGGTGTTG ATACCCAAAT	600
	GTTAATCGGT GTTGCTGTGA GCATTTTCATT TAATAATTTA GGTTTATTAA TCATGTTTTT	660
	ATCTACAAGA nTnAAng	677

30 (2) INFORMATION FOR SEQ ID NO: 1664:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1664:

40	GTTACACAA TAGTGGTATA AAACGGGAGC AATTAGAGAT CAATATATGA TTATTAAGAG	60
	CA	62

45 (2) INFORMATION FOR SEQ ID NO: 1665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1665:

55

EP 0 786 519 A2

GTTTACGCAA ATGATAGCTC GGTAACACAT GAGCAACATG TTGAAGCCAA TTTGGAAATG 120  
 TGTTTATCGG AAACCACAAT CCACCTAATA CTGCTAAACC AATTGTTACG ATATTAGCTA 180  
 5 AAGCACTTGT TTTTGAATA TCATTTAACA AAGAACCATA ATATGCCAAA AGTTATTAAT 240  
 AGAGACGCAC CTAACCATAA AAATATTCCT GACTCTAACC ATTGAACTGC ACTCATTGCA 300  
 ACACCTTTAT AAAAATGTCC AACCATAAAA ATAACATAA TC 342

10 (2) INFORMATION FOR SEQ ID NO: 1666:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1666:

GTCCAAGAAT TCAAAAACGT TTTCAACTTC GGCCAAAGCC CAATTTnTCT TTGTGGTTTA 60  
 ACTTTTTAAT TTTGAACGTT TTAGGGCATA AAAAAAAAAA GG 102

25 (2) INFORMATION FOR SEQ ID NO: 1667:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1667:

35 TTGATAGTAG CCATAATCAT ACCACTTAAA TAATATGTTT GATCATCGGC ATAATTTTTA 60  
 TTTATTGTCT GTTCGCAATA TTTTGAGCAT TATCATAATT ACCACTAGTC ATATCATCTT 120  
 40 TG 122

(2) INFORMATION FOR SEQ ID NO: 1668:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1668:

AGAGATGAAA TTAAATCGC AATTGAAAAT TTCAAATCAC GATGAGAGTG GGACAGA 57

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1669:

AACTACTGCC AATATTAATA GCATTGGTAC ATCTTAGAGG CATTGAATTC CTTACTCAGA 60  
CTCATAATGC 70

(2) INFORMATION FOR SEQ ID NO: 1670:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1670:

TTGTCTGATA TAATCCATT CGATTGGACT CCACACGTTA CACCGATACC TTCTTTACCA 60  
GCCCGACCCG TAC 73

(2) INFORMATION FOR SEQ ID NO: 1671:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1671:

GAAGAATTGT ACTGTAAAG TGACTCTAAA CTATCGCGGA AATAACAGTG AAATCACCAA 60  
TTAGACTAGC GACACTGAAG TCATTAAAAA CAGACATTTG TAGTGGTGCA CTTATCACCG 120  
CAAATACAAG AGAGTTTCTC 140

(2) INFORMATION FOR SEQ ID NO: 1672:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

AACAACGTTT ACTATTGGCA CAGAACGGTT GGTACTTAGT CTAATACCAT TGTCATCAA

59

(2) INFORMATION FOR SEQ ID NO: 1673:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1673:

ATCTCTTTGA CTTGAAGGAT TGGATTTAAA TCTTGGTGAT TTGGGCCGTG AAATATTTCC 60  
 AGAAAATTCC TCAGACGTAT TAGTATAATT GTAACGnTAC ATTCTAATAT ACCTTTCTTC 120  
 GATG 124

(2) INFORMATION FOR SEQ ID NO: 1674:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1674:

CACCACCACC ACACACACAC ACACAAACAC ACAACCCCCC CACACACAAA CCACACCACC 60  
 AACACACCAA CACAnCACAA AAACCCACCA CACACACCAC ACACCAACC 109

(2) INFORMATION FOR SEQ ID NO: 1675:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1675:

TnGTCAACTG ATTTATGAAA TGGCAGAGCA TATGGCGTCA AAGGTTCTTA ATCGTTAAGC 60  
 CAGACCACTG GAGGACCATT AGATGCAGCG TTGCTTTCAA G 101

(2) INFORMATION FOR SEQ ID NO: 1676:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1676:

TTTTTAAAT TTGnAAATTT TAGACCTTAT TTCACGTGCG ATTTAATCGA TGTGTTAATA 60  
 5 AAACAATACT GGCATTCAAC ATGTAATCCG ATAATAAAAT AAGGTTGCAA TTATGTTATT 120  
 GCATATTTTG TTTATTACTT AGAATAATAC GATGGTTAAG ATGAAATATA TGACAAAGAT 180  
 10 AAATAATGAC ATTAAATTCA AGATGTTTAC GCCTTTTAGA TCTTTTAA GCATTTTAAA 240  
 TCCTGTCCT TCKACATTAC CGACTAAGAG TAATAAGACG ATAAATACCC ACCAATTsTC 300  
 TTTTGGAAAA CTCATCGTCG TTAATGCTAA GACGAATAAT AACACACAC CCATAATAAT 360  
 15 TCTCAAAATG CGAGTAAATA CAACTTCCAT TTAAAAATA 400

## (2) INFORMATION FOR SEQ ID NO: 1677:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1677:

TCTTACTCAT GCATATGAGT GCAAGGGCCT GAGCATTCAI CAGCAAGATT AGAGCGATT 60  
 TTAC 64

## (2) INFORMATION FOR SEQ ID NO: 1678:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1678:

ACAGCTGATT TATTAAATGA TACTAAGTCC AAAGGCATGC GCATTATATC AGTTGGTACA 60  
 TTTC A 65

## (2) INFORMATION FOR SEQ ID NO: 1679:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1679:

5 AGCGCCACCA ACTGACGAAT TAGGTGGTAG TTGGACACTA TGGAAAAATT TAGCGCGACA 60  
 AAGTCCTGAA TTTGGTAATC CTGATAAGTT TTGCCAAAAT ATTCCTA<sub>n</sub>AA AAAGTTGGTT 120  
 TGT<sub>TT</sub>CAGCA ACTTCTACAA CAAACAATAA AGAGATTATC GATACAATAG AAAGTATTTG 180  
 10 TAAACGTGAC CCACTTGGCA GGCAAAACAG TTACAGGCGG TATTATTACA ATCAATGATT 240  
 CTGCATGGCA AATGAGTTTT ACAATCAATC GTGCAGCAAC AGTTTGAAAG ACCAACCTGG 300  
 AAAATGGAAA TATCTACATG GGGTTTGATG CCTTATGATT CnGGnGTAAA CGGCGGTTGA 360  
 15 TG 362

## (2) INFORMATION FOR SEQ ID NO: 1680:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1680:

AGATACTTCA GATTTAGCAT CATGAAGCAA CTTTAAAAGC AATCGCTGAC GCTGGTATTC 60  
 30 AGCCCGAGG 69

## (2) INFORMATION FOR SEQ ID NO: 1681:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1681:

40 TAACCATTTT TTTTGACGTT TTATGTTGTT TTAAGAAATA AATACCAGTT AATGTA 56

## (2) INFORMATION FOR SEQ ID NO: 1682:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1682:

55

## (2) INFORMATION FOR SEQ ID NO: 1683:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1683:

CCCCAACACA ACAACAACA CACCCACCAC CCAACCCAC CACACCCACC CACCACCCCA 60

ACCCACCACA ACACCACnCA CCAACACACA CCACACAACA ACCCCACAC 109

## (2) INFORMATION FOR SEQ ID NO: 1684:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1684:

ATTATGTTCG CGATAATTTA AGTAAAAGAA GCACAGATAT TGAATTTGAT AGGAGTAATT 60

GT 62

## (2) INFORMATION FOR SEQ ID NO: 1685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1685:

CATAAGGTAC TTAAATTAAAG GCATATCTGC TGTCTAGCAG TCGCATAAAT CATTAGA 57

## (2) INFORMATION FOR SEQ ID NO: 1686:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1686:



## (2) INFORMATION FOR SEQ ID NO: 1687:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1687:

CTTTATAGTA TATTGCTTTT TGTTTTCTT TTTCGTCATA TTTCACTTT AAATAGATAC 60  
 CTGCAACACT AATTAATATG ATTAACATAA TACTAGTTAA TATTAAnATT 110

## (2) INFORMATION FOR SEQ ID NO: 1688:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1688:

AATTACTAGT CTGCTTGTC AAAGATTATT TATATTCTAG CTCAACATT AATTCTTTGA 60  
 TTTTGGTACC ATCTATCGTG TCACCATGC GATGCGGTTG TAGTTTTTTT GTAAGTTCGA 120  
 AAGTATAAAA CTTATCATCT TCCATTTTAA CTACAATTTT ACCTTTTCTA TTATTAACAG 180  
 CACCATATAA TTTTTCTTCT TCCATCAATT TTTT 214

## (2) INFORMATION FOR SEQ ID NO: 1689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1689:

GCTAGTTGTA ACGTGCTTTT TCACCACCAG ATAAATCATA ATATCTTTTA ACATCTCTG 59

## (2) INFORMATION FOR SEQ ID NO: 1690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1690:

CCAAACTTTA TAATATGAAA TGCTTGGTAA TTACAAAGAT AAAATCATAC TCACG

55

(2) INFORMATION FOR SEQ ID NO: 1691:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 64 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1691:

TAGACAGCAA TCCATTGCTA TAGGGGTGGA TATCTCATTT GCGTTTGGAG CTGTGCTTGT

60

TATG

64

(2) INFORMATION FOR SEQ ID NO: 1692:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1692:

TGCATGGGAT TGCAGCTAAG AGAATCATAA AAATATATTA CTTTAATAAG TGTAGTA

57

(2) INFORMATION FOR SEQ ID NO: 1693:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 74 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1693:

CGATGTGTAC GTCTCACCTG ATTTGCGACG GTAAGCTAGT GCATATTCAG CACCGCTACT

60

CGCCCAGCCT AGAC

74

(2) INFORMATION FOR SEQ ID NO: 1694:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 162 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1694:

AACTTTTCAG ATGTTGATAG CTATAGATTT AGGCGCTATT CACCA~~n~~GTCT ACATGCAATA 60  
 5 CGTACGTTAT AATGCACTGC AACGAATCGC GCGTTATGAG TTGGTAATTG TTGTTCAATA 120  
 TTGGGTGTAT AGTTTTCAAC GTGGTTACAA GCAACTACCT AA 162

(2) INFORMATION FOR SEQ ID NO: 1695:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1695:

20 AATTATCTCT ACACCTTTTC TTTCACATAA TTGACGCAAT ATAATCCCTA TATCT 55

(2) INFORMATION FOR SEQ ID NO: 1696:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1696:

30 ATGCAACGTT GGCATTGGGA AATGGTCCTG CCTAAATTAA CACGCAATAA AATGTG 56

(2) INFORMATION FOR SEQ ID NO: 1697:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1697:

45 ACTGTGTAGA AGATGCTATT ATTGTAA~~A~~AC ATAGTTTTAA TTTTATTTTC TGATATA 57

(2) INFORMATION FOR SEQ ID NO: 1698:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1698:

AAAATTTTCC CCCGGAACC CGGTTTTTTA AACCCCCCGT TTTAAAAAA TTTTGGGGGG 60

5 CCCAAAATTT CCCAAAAAA nAAAAAATTT TTTTTTCCC GGGGAAAAA 109

(2) INFORMATION FOR SEQ ID NO: 1699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1699:

GTGTTAACGT GGATTATATC AAGGAGGCGG TCAGGTACAG TCCACACGCA CAGCGCACAG 60

20 AAGTATCACA TCCAGTAAAC AAGGCTAGTA CAGCATTGCA 100

(2) INFORMATION FOR SEQ ID NO: 1700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1700:

AAGGTAAAT GAATTAGGTT GATCAATGCT CTATACTCAT TGCTAAGTCA ACGCACCTTT 60

35 ACCACCTTTT CCCAACTCAG TAAGGCATTC GACGTATTTC TTAGCCAAGn TTACATATCT 120

ACTCTGCAC 129

(2) INFORMATION FOR SEQ ID NO: 1701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1701:

50 CAAGAGGAAC AACTCGGTAC TGCGCATCAG CAGAGATGGC GAAATCACAC TTAGAAGACA 60

AGG 63

(2) INFORMATION FOR SEQ ID NO: 1702:

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1702:

10 TATTTAATAA ATCTTCAATA CCTTGTTTCAT CAGTTTGTTG ATAAATAAGA CCTCTCCATT 60  
 TTAAATCTTC AATTAATACA TTCGTCATTA TTATTTCCTC CTATTTATAA TTATTATTG 120  
 AATACTTGTT AAAATACTTT AAAGKTTTTT GAACGTAAAA AAAACCCTTA CAACAAATAT 180  
 15 GTAAGGGCGC GATTGCACGT TACCACCAA CTTAAACATA ATCATAAGAT AATGTTCACT 240  
 CTATTAATGA TACGTTTCATT AATAAACGTA GGACATGTTA GTTATAAAGG TGTATTCATA 300  
 20 TTATTAAAAA CACTAGTTCA CAGCGACCAC TAGCTCTCTG ATGATTTCAA ATAATATTAC 360  
 TTGTCCTTTT ATCCTATTCT GTATGCATTT TCCCTAATTA 400

## (2) INFORMATION FOR SEQ ID NO: 1703:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1703:

TCAATATTGA TATCGAAACG CTTTGCAGAT TGATATAAAT TATCAGAATC AAGTAATTCA 60  
 35 TTTATTTTCT TTGGTGAAAG TACTTGAAA ATACTATACT GATGAAAAC TAAAAATGAA 120  
 ATGAAGTATG GAAGTTGTTG CTTTGGGTAA GCAAAATTTT TAATACATAC TGATTAAACT 180  
 40 GTTTGTTTAT TGnGAATTGC AACGCATC 208

## (2) INFORMATION FOR SEQ ID NO: 1704:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1704:

AAGCCGATGT AATTATTTAT GCAACACCTG TTCTAATGCA CAAAGAAATA TCTTAGCGAG 60  
 55 CTTATAG 67

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1705:

CCAAGTTGCA TGTATTTTA AGCTGACTTT CCACCAACTT CTGAGTTTGT GGCC

(2) INFORMATION FOR SEQ ID NO: 1706:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1706:

CAACTACACG AAAGGGTAGT GCTTCAAGAT AATAACGTCC AATTATTAGG AACTGTGGCG

A

(2) INFORMATION FOR SEQ ID NO: 1707:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1707:

ACCATTCCAA ATGAACCTAA ACCACTTGAT ACGTTGACGA CAACAGGTTG TTCA

(2) INFORMATION FOR SEQ ID NO: 1708:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1708:

AAATTTGAAT AACTGTACAC ATTTTTTTGA TCATAGTCTA TATACTTTGT GAATTAATT

(2) INFORMATION FOR SEQ ID NO: 1709:

- (A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1709:

10 GCACAATAGC CAATTAGATG GGGCCGGTGC GGTAACATTT TGCTTCATTC CTGCATTAT 59

(2) INFORMATION FOR SEQ ID NO: 1710:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1710:

TTACAATTCA ATCAAGTTCT TCATTATCAG ACGAAGAAAT CCACCGTATG GTAAA 55

25 (2) INFORMATION FOR SEQ ID NO: 1711:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1711:

35

TTTCTGCTTA TTGTCATTGC ATATCGAATT ATTAGAAAGT GCAGATTTGC CATCAG 56

(2) INFORMATION FOR SEQ ID NO: 1712:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1712:

TAAACCTTTA GGATTGCTGG CAATAGTAGT GCAGTTGGCT GGACTTGTCA TGCCC 55

50

(2) INFORMATION FOR SEQ ID NO: 1713:

(i) SEQUENCE CHARACTERISTICS:

55

- (A) LENGTH: 207 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1713:

5 CAAGAGGATT CGTGCANTGA ATTCATGGAG ATATTTAGAT CTTTCACTGG AGAGAAAATA 60  
 AAAAGAAGAA AAGAGTAACC TTTAGATTGC TGGATnTGTG CAGTGGCTGC TTGCGTGCCT 120  
 TTAGGTGGCA TAAGGAGGCT ATACGCAGAC AACCACCGTC CCGGGGTTTT ATTGTACACT 180  
 10 GTGTAGGACG CAGACTTTAT GTGGTTG 207

## (2) INFORMATION FOR SEQ ID NO: 1714:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1714:

20 TGGTTATCGA CTGCTCGTAT ATTTTGACTG TTTTGACTGT TGTTCGTA GCAATACTAT 60  
 25 CTCCTAAGCC TTTCATTGGC ATTG 84

## (2) INFORMATION FOR SEQ ID NO: 1715:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1715:

35 GTTTGAATTG ACTGACTTCG TTTTACCGCG TGTTTAATAT TGTATACAT ATAT 54

## (2) INFORMATION FOR SEQ ID NO: 1716:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1716:

50 GAAGCCTGTC AGTGGATCAA ATTATTGAAG ATAACCTGGG TGGCATTTTT GGAAAGTCCA 60  
 AATGCTGGGA ATGGTCA 77

55



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1717:

GGGCCCTTTT TTTCCCAAAA AAAAAAACCC CCCCAACCCC AATTTTGGnC CCCCTTCCCC 60  
 TTTAAAAATT TAAAAATTGG GCCAAAAGGC CCCCCCAAAA AAAACCCCCA ATTGGAATTG 120  
 GAAAACCATT GGAACCAATT CCATTGAACC AGGA 154

(2) INFORMATION FOR SEQ ID NO: 1718:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1718:

ATTGTCTACA CTGCCACTTT ATTTTCATTA ACCATTTTAC AAATGTGTTC ATCATTCAAC 60  
 ATGAACATCA ATTGTTCAAT TACATCGACA CCTGATGCCT AAnCACGCAC CTTTTCACA 120

(2) INFORMATION FOR SEQ ID NO: 1719:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1719:

TTCATTTGTT TGTAAAAGTG GCATTTCTAT GTCTTAAAAG TGACGAACT TCAC 54

(2) INFORMATION FOR SEQ ID NO: 1720:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1720:

## (2) INFORMATION FOR SEQ ID NO: 1721:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1721:

TTTGGATTAT AAATTGACAT GTAAGTACGA GGCAGCTGTA CCCGATATAT AATTGCTAAG 60  
 AGTTAGGGCT G 71

## (2) INFORMATION FOR SEQ ID NO: 1722:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1722:

TTTTATCTTT ATTACTAAAA CCAACTGCAC CAAAGTTTGC AGTCATTACC ACACGTTTAA 60  
 CACCCGCATG TTCTGCAGCT CTTAAAATAC GTTGTATACC TTCAATTGCA GGCTTCGCCA 120  
 TCACTTCTGC ATCGTCTGTT TTACCGAAAA ACACCGGAGA TGCTACACTC AAGACATACT 180  
 TGCAATCTTT CATTGCTTCA TCCCAATGTn CATCTTGTGA TAAATCCGCT TCGACAAACA 240  
 TTAATCGCT CTGTGGAAAT GCCCATGTCT TGCATTGTTT nAATTACTTT ATCAGCTTTA 300  
 CTTAAATCAA GnATCGTCGT TTGTA 325

## (2) INFORMATION FOR SEQ ID NO: 1723:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1723:

CAGTATTGCA GTCACGACAA TGTGATGACT AAATTATCCA AAGTATGAAT TCCATGCGGC 60  
 ATTAATCCTA G 71

## (2) INFORMATION FOR SEQ ID NO: 1724:

(A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1724:

TTGCAACGAT ATTAGGCTAT CTAGTCGGCA TATTTGTAAA ACAAGATCCA ATT

53

(2) INFORMATION FOR SEQ ID NO: 1725:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1725:

ATCTATTTCAT CTTTCGTACAC GGACAGGAAA TGAGTCCAGT AGATGCACAT TGGGAATTAA

60

TCGAAGCTAG C

71

(2) INFORMATION FOR SEQ ID NO: 1726:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1726:

CATCTTGCAG GTCTACATTA TAAAATGTGA AGTTTTCTAC GATAACAATT GGGAAACTCA

60

GGGGCATCTC C

71

(2) INFORMATION FOR SEQ ID NO: 1727:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1727:

TTCnTTTTTA AAAATTCCCC ATTCCTTTTT AAATTTCTTT CCCGCTGGAT TAAATGGATT

60

TTAAAAATTC CACCCCAACT TAAATTAATA TGGCTTGTGG AAAATTAACG GGATTGGCAT

120

TCCAGCTTAA ATGGTTTTTT TGGAGGCTTC CACGTAAAA ATGGCGGGTG GCTTT

235

(2) INFORMATION FOR SEQ ID NO: 1728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1728:

TAGAGTGGCT ATAAAGCTAA GTTCAATTGA CCAATTTACA ACAGGTTATT GAGGACAATA

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1729:

ATCACCAAGA AGTTCTAATG CTTGGTATAA ACGTTGAATA CGACGTTCCG TATT

54

(2) INFORMATION FOR SEQ ID NO: 1730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1730:

CGTCCCGAAG CGTTGGAGGC GGGAAACATCC AGAGTAATTG GCACAGATTA TGACCATAT

59

(2) INFORMATION FOR SEQ ID NO: 1731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1731:

(2) INFORMATION FOR SEQ ID NO: 1732:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1732:

TATGTGGTGT TCAATGCAGT GGTCAATTATG GTGCATCTTA CCAGATTCGG CATTCTTATT 60  
 ATAACTATAC TTGTAATAAA TGGCGACATG CAGACACGnC AATAC 105

(2) INFORMATION FOR SEQ ID NO: 1733:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1733:

TTTACGTTCC ATAGCAAAGT GATACAAACG TCAGCATCAA TGTAAGGCAT AGATCATAGT 60

(2) INFORMATION FOR SEQ ID NO: 1734:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1734:

TTCCATCATA CATTGCGGTT TTACTTTTCT TCTGGTATGA TCAAATATTC ACATAA 56

(2) INFORMATION FOR SEQ ID NO: 1735:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1735:

AAATGGGGAT GAAACAGTTA GTGTACAGGT GAAAGCTTAA CAGCAGCTAC AATTGCA 57

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 61 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1736:

GATTTGCAAT TAAACTTAAA TGTAATTTTT CGGAATGTGT ATTTGGTTTA CTAAAGTAA 60  
A 61

(2) INFORMATION FOR SEQ ID NO: 1737:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 57 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1737:

AAAGAAGCTA AAGAAAAAGT TGATAAAACA GCAAAGTGA TTATTAGCTA CAGCATT 57

(2) INFORMATION FOR SEQ ID NO: 1738:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1738:

CAATAATATC GCTAAAACCG CCATTGTAC CAAATGAATT TGATAATGCT GCAG 54

(2) INFORMATION FOR SEQ ID NO: 1739:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 59 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1739:

TAGAGCCCAA CCGGCAACCC ATCCATGGAA ATTCACCAA ATAATACATT GACCCCAAG 59

(2) INFORMATION FOR SEQ ID NO: 1740:

(A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1740:

10 CCTTTTGGn AATTTAAGGG GGTTCCCAAC CAAATTCCCC CAAATTTTTT TGGGTAAAA 60  
 AAACCCGGCC CAAAAATTA AGGGAATTG GAAAAGGTT TGGTCCCTT TTTTCCCAA 120  
 GGCCCAAAT TTGGAA 136

15

(2) INFORMATION FOR SEQ ID NO: 1741:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1741:

25

CATTCAACCA ACGACTGACA ACAGAACATT TAAGAGTCTA GGACATTGAT TGA 53

(2) INFORMATION FOR SEQ ID NO: 1742:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1742:

40 GTCGTCTGA TTCAGTCACA AAATTGTCTT GTTATACTTG TCACCTATCA TC 52

(2) INFORMATION FOR SEQ ID NO: 1743:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1743:

TGTTATTTAA AGAGGCTCAA GCTTTCATAG AAAACATGTA TAGAGAGTGT CAT 53

(2) INFORMATION FOR SEQ ID NO: 1744:

55

(A) LENGTH: 94 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1744:

10 TCTGAGTTAA AGACGTCTCA CTAAAGCTT TAGCAATTCC AACATCAGA TATCTTCACA 60  
CGTGTTATAT GTGTCCATTA ATATATCCTG TGGC 94

(2) INFORMATION FOR SEQ ID NO: 1745:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 212 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1745:

25 GGAAAAAAnn TTTTAAAAA AAGGGAAAAG GGAATGGGG TTCCCGGCC CTTTTAAAG 60  
CCCCCAAATT AAGGAAATTT TAAATTTTGG GGAAGGGGAT TTTCCACCGG TTAATAAACC 120  
GCCGATTTTG AGGGGGTTGA ATTAATTGGC CCAAATTTAA AAACCTGGAT GCTGGGTCCA 180  
30 ATTTTTTACC GGGACCAATT GGTCTGTCAT GA 212

(2) INFORMATION FOR SEQ ID NO: 1746:

(i) SEQUENCE CHARACTERISTICS:

35

(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1746:

TATCTTCCGA TGAAGAACAA GATGCACAAG AAGTACGCCA ATGATTTAAG AAAGTGGT 58

45

(2) INFORMATION FOR SEQ ID NO: 1747:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1747:

55



AAAATTAAGn CCTTTTTTAA CCTTCCCTT CCCCAATTGG GGCCT

105

(2) INFORMATION FOR SEQ ID NO: 1748:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1748:

AGTGCCTATT ACTTTGATTG ATGTCCAAGT TTCCTATCAC ACAACTTAAT TT

52

(2) INFORMATION FOR SEQ ID NO: 1749:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1749:

AAAGCATCAT CCGAACTCCA ATGATTATAC TCCCTAGATA TTATTATGTG ATGCTTTGAG

60

CATTAAATTAG AGATGGGACG ATTCCATGAA AGATA

95

(2) INFORMATION FOR SEQ ID NO: 1750:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 63 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1750:

TTGACACATC TACTCACATT AAAAGTAGAT GAAGCGTTGA GATTAAACATT TCCACATTTA

60

CAA

63

(2) INFORMATION FOR SEQ ID NO: 1751:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TCGATATTTG AGACACGCTG CTGTAATAAA ACATCCTATA AAGTATATAC CAAGATCTAC 60  
CAATATAAAC AGCGGCTATA TGATATAAAT GCTCAGACAC ACCCnCTGCG ATCCAT 116

5 (2) INFORMATION FOR SEQ ID NO: 1752:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 114 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1752:

TATGATTAAG CTTAGTGCAG ATTTGATTTA TThAACAACG CTTCACTACA TTAAAAATAG 60  
GGCACTCGCA CATATAGTTG TATCAATAGC CTTTATCAAT TTTTGGGAA GGTT 114

20 (2) INFORMATION FOR SEQ ID NO: 1753:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
25     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1753:

AACTTCAAAT GTGCCAAGTG TTGAATCACA TCAAAATCAT TTTTATTAA CG 52

(2) INFORMATION FOR SEQ ID NO: 1754:

- 35 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 75 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1754:

ACTAATCCCT TCGTGTTTC CAATCAATTG CATTATTAGT GGCCATTGT TTGATATAAC 60

45 TGACAAGCTT TAACC 75

(2) INFORMATION FOR SEQ ID NO: 1755:

- 50 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1755:

GTGAACAAGG GTAGATGTAA ATAGTTGATG CATGTGTACA CATCATAACA AAA 53

## (2) INFORMATION FOR SEQ ID NO: 1756:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1756:

TTATTGGGC AGGCAAATAC CCTTAATATA TTCAAATCAT GTTAATATCA TTGCTATTGC 60

TAAACC 66

## (2) INFORMATION FOR SEQ ID NO: 1757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1757:

ATTAATCGGA GCACTTGGGT TCGCAATTTA TGCTGAAATG GATCATTCTA CATCATC 57

## (2) INFORMATION FOR SEQ ID NO: 1758:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1758:

CGAACAATAA CTCTAAGTAT CCAACAAATG CTGCAAGTGT ACCTACTGTG ATTGATCCAG 60

AAATAGCAAG ATATGCACCA ACACCGATGA CAATAATTGG TCCAATATCT GTAACGTAT 120

TAATTGCGGC AAAGGAATAg GCATTCCATC TTGTATGTTT CAACGCACGT GTTAGGAAAT 180

TAGTATTCTT TTTATCAAAG TTTTTCGCTT CATGTCTTC AATCGCAAAA CTTTAAACGA 240

CTGAAATACC TTGAACACGT TCATGCAAGA ATCCTTGAAC CTCAGCTAAT GCTTGAGATC 300

TTTCaNGTGT CAATTTTCTT AATCTTCCAA AGAAAACGTA CACCGTTAAA ATGTAAAATG 360

## (2) INFORMATION FOR SEQ ID NO: 1759:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1759:

ATTATGTCA TGCTAGGTCA CTTGCATCAT CCATTAGTA TAGAAGACGA CAAAATTAAA 60  
 TTATAGTGGG CTCCTTGATT GGCAGTATTC ATTTTCGGGA AGCGGGGTCC AGGCTTAAAG 120  
 GGTATTAGAC GTGGTTACC 139

## (2) INFORMATION FOR SEQ ID NO: 1760:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1760:

TCGCCCCCTCC AGGCTATTAT TTCATCTATA TCATTGTCAT CAGTTAAATT CAGCCTCGAC 60  
 ATTTCCATT CAATAGACTG TTCATTCAAT TCTAAGTCAT TATTGTAAGT TTCTAGTTGA 120  
 TTTTCATAAT GATTTAGATT ATTTTGCTCA ATTAACTTTC TTTGAGACAA TTGCATTAAAC 180  
 TTATCTTCAA TCTCCTTTGA GAGTTCTTGA TGCTGATTCA CATCTTGAAC ATACTTCTTA 240  
 TAATCCACCT CAAAATTAGT GATATTANTA TATnTCGAGA GTGTTTCAAA TTCAGTGATG 300  
 AGATCTCGAC ATAAT 315

## (2) INFORMATION FOR SEQ ID NO: 1761:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1761:

TAAATCCTCG AGATTCTTAA TAGGGTAGAT ATCTAACGTT TTCGCAAAGC TCTTTTGTGAT 60  
 TTGTTCTTCT TTTGAATCTC CAATGATCTT ATTATCACCA TCACAAGATG TAACAAAGAT 120

CCATCCTCAT CATTATCAT CTTTCATCTAC CTTTCGCGCT GGAAATTCAA aGAaTCTATT 240  
 ACTGACAAAT CGCTTTTTTCC ACCTTTTGAA AAGTCAATTT CCAACTTTTT ATAACCCACA 300  
 5 GAACCTTCCTT TCAAATTACC ATCAATATGC ATTTTAAATA CCGGTGCTTT ATCAGTAGGA 360  
 ATATTATAAC GACTTCTTAA TTGCTTAACA TTTTCATCT 399

(2) INFORMATION FOR SEQ ID NO: 1762:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1762:

20 GTATAGAAGA CGACAAAATT AAATATAGTG GCTCCTTATT GCAGTATTCA TTTTCGGAAG 60  
 CGGGTCAAGC TAAAGGGTAT AGACGTGTAC AATTAATGAT GGCATTATTA ACGATGTATT 120  
 TATTCCTCTT AAGCCACTTA GACAATTGGn AATTATCTCA GGCGAATATA ATGATGTTAT 180  
 25 TAATGAAAAA GTTCATGTGA AAAATAAAGA TAATTATnTA CATT 224

(2) INFORMATION FOR SEQ ID NO: 1763:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1763:

AGCAACCAAC GCCAGATAAA GCAGAAGATA ACGCATTTCC CCCCATCACC ATAT 54

(2) INFORMATION FOR SEQ ID NO: 1764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1764:

50 ATTCCCTTAT CGCATTCTGT AAAATGATCT TCATCAGAAA TTGCTTCGAT ACGTTTATG 59

(2) INFORMATION FOR SEQ ID NO: 1765:

(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1765:

10 GATTCAATTC ATCTGTATAG ACGATATATC CTGATATGAA TTGGAAATGG AATA 54

(2) INFORMATION FOR SEQ ID NO: 1766:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1766:

ATCGCATAGA AGCATTAGAC TCAAAC TATT TTCGGTTATG AGAATAACTC TGACATCCAT 60

25

ATGGATACTT AGTTTCCAAG TTAGA 85

(2) INFORMATION FOR SEQ ID NO: 1767:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1767:

CAGTACTGCT GAATGATGCT ATTGATTTTC TCATGAGACA TGGCGATAAC ATCG 54

(2) INFORMATION FOR SEQ ID NO: 1768:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1768:

50 GnCACTACTA ATCGTATCAG GATCACTAAT TAAGGCATCC AGCATCAGAT ACGAGCGCAC 60

GTCAGACTAA TCTACTGTCA TGATAAAGCA GCTGCTAACC TTGTAAGTTC GTGAAA 116

(2) INFORMATION FOR SEQ ID NO: 1769:

55

(A) LENGTH: 82 bas pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1769:

10 GTTCTATCCA ATATGGAAAT GAGGACATTA TCGGTGAAAG CTATGGACGA TGGACGATGG 60  
TACACGCATG TTGTGTAAGC AG 82

(2) INFORMATION FOR SEQ ID NO: 1770:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 152 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1770:

25 TATCTGTATT GTAGTAATCC GCTTCTCCCA TCTATATAGG GATCTTTCGT AGATATTCAC 60  
TTTATGCCTA GGATCCAAGA TGTGTAAGCA GCACCTTGCA TTATCTAATG CAAAGGGnAC 120  
ATGCGGCTGT AAGCCCTGTT CTGATAATCA TA 152

30 (2) INFORMATION FOR SEQ ID NO: 1771:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1771:

40 TGGAGGCGAA GTAAATGAAA AGTATTACGT TTGAAGAACA TTATGTCATT G 51

(2) INFORMATION FOR SEQ ID NO: 1772:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 232 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1772:

nGAAACAAAT ATCTGATGAG ATATGCAATG ATGACTATAA GTAACATTAA AATGAAGCCC 60

55

CGTACACCAA TTATATCTTT GTGGnTGTTA TATTAAATCT ATATTATGTT CATTTAACAG 180

CATATGTTAA AAATTGACAG TTAACACATG TAGCTATTTG ATGTGAATGT GC 232

(2) INFORMATION FOR SEQ ID NO: 1773:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 108 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1773:

TAATGTCCCC CAGAATGTAG GCAAATGCAG AACCTGGTTT TAGGGTCAAC TGTTTnTTCT 60

CCAAGCAGAA ACAAGTTCT TGTGTCAGTG CACTTTTGGT CCACCATT 108

(2) INFORMATION FOR SEQ ID NO: 1774:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 111 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1774:

CGCAATTGAA GGATACACTA TTITAAGAGC TGCAAACATG CGGGTGTAAC GTGTGGTATA 60

CTGCAACTTT GGTnATTGGT TTAGTATAAG ATAAAATCAT CACAATGAAT C 111

(2) INFORMATION FOR SEQ ID NO: 1775:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 73 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1775:

CAGGTATCA GCTAATAGAT ATGTTGAAGA GGCAGTTGCA GGCCAAATGA AACTGCAGAT 60

GTAGTTCAGT ACC 73

(2) INFORMATION FOR SEQ ID NO: 1776:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 67 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1776:

5 TAGACACAGT GCAAAATCTG GTACAGCTTA TGGAATTAGA CGGGTAAAGC AAATTACTGA 60  
GTACCCA 67

## (2) INFORMATION FOR SEQ ID NO: 1777:

- 10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1777:

15 GTATGCCAGT GTCATTGCTG AAAACATCAA CCATTCCCTG CACCAAAATT TTTTGGTAGA 60  
20 GTTTGATGCT GGCCATCCTC CAAGGGACTA AGGGTAATTT TgntTAAAAA GAGCCAAAGG 120  
CCCAATG 127

## (2) INFORMATION FOR SEQ ID NO: 1778:

- 25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1778:

35 GAACCCAAAA ATTAGCAACA GTGGCTACAA TAGTTGGGCA CTGAAAGCCA GCCAAGTGGG 60  
ATTTTtagcc CTTGATTtGA AAGCGGGGTC CCCAGGATTA AAAAAATTAA ATTAGCCTAA 120  
TAAGCCCAAA ATTCCCATTT GGAAAAGGAA ACCTCCTTAA ATTGGGTTGG AAAAAAGnTT 180  
40 AAAAAAAAAA AGGCCcAGnC CTTGGAATTT TTTGGAATTG GAAAAAGGAA TTAAAA 236

## (2) INFORMATION FOR SEQ ID NO: 1779:

- 45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1779:

## (2) INFORMATION FOR SEQ ID NO: 1780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1780:

GACGACTCGC TTCTATTTTA AAATCCGGCG TACTTgGTTA TATAAATATC ATAATGGTTA 60  
AAATTAAAAA GCAATGTCAG TTCACACTAT TACTGACATT CTTTtagTTA TGTGTATATT 120  
ATTCATTACAC AAGCTTTTGG TCTATAAATC GAGTGATTTG CTTTgTTTGT ATATAACCAT 180  
CTGCTACATA TTCATCGTTC ATTGTAATTA ATGGATAAAA TAGTTCATCn n 231

## (2) INFORMATION FOR SEQ ID NO: 1781:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1781:

GTCTCCCTGC CCCACATTTA ACATTGTAAT TTTGTGATGT GAATTGTTG GAAACGTTAT 60  
TAATAATGTC AGAATAATTA TAGTCCAAAA CGTAACCAAT ATATATTTAC GTTTAGCCAA 120  
TAACCAAAAT ATGTAATAAA CAGAAATTAT AAATACTATA AATATCCAAT CATTAAACTT 180  
GGGAACAGAA AAATGTGATT GCTTGATTC 209

## (2) INFORMATION FOR SEQ ID NO: 1782:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1782:

GTTAAGCTTA GTTAGATAAA ATGCAAATCA CATTATTGTA GATAGTCTCT TTTC 54

## (2) INFORMATION FOR SEQ ID NO: 1783:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs